Manitoba

Annual Report 1985 - 86

Agriculture

Manitoba

Minister of Agriculture

Room 165
Legislative Building
Winnipeg, Manitoba, CANADA
R3C 0V8

To His Honour,
George Johnson,
Lieutenant Governor for
the Province of Manitoba.

Your Honour:

I have the honour to submit herewith the Report of the Department of Agriculture for the period April 1, 1985 to March 31, 1986.

Your obedient servant,

Bill Uruski,
Minister of Agriculture.

Manitoba

Deputy Minister of Agriculture

Room 159
Legislative Building
Winnipeg, Manitoba, CANADA
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Honourable Bill Uruski
Minister of Agriculture
Province of Manitoba

Sir:

It is my pleasure to present the annual report of the Manitoba Department of Agriculture for the twelve month period ending March 31, 1986.

Respectfully submitted,

G.J. Gartner
Deputy Minister

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Manitoba Agriculture

Executive and Directors

April 1, 1985 to March 31, 1986

Executive

Honourable Bill Uruski, Minister

G.J. Gartner, Deputy Minister

T.L. Pringle, Assistant Deputy Minister
Agricultural Development and
Marketing Division

C.C. Cranston, Assistant Deputy Minister
Farm and Rural Development Division

G.J. Lacomy, Assistant Deputy Minister
Management and Operations Division

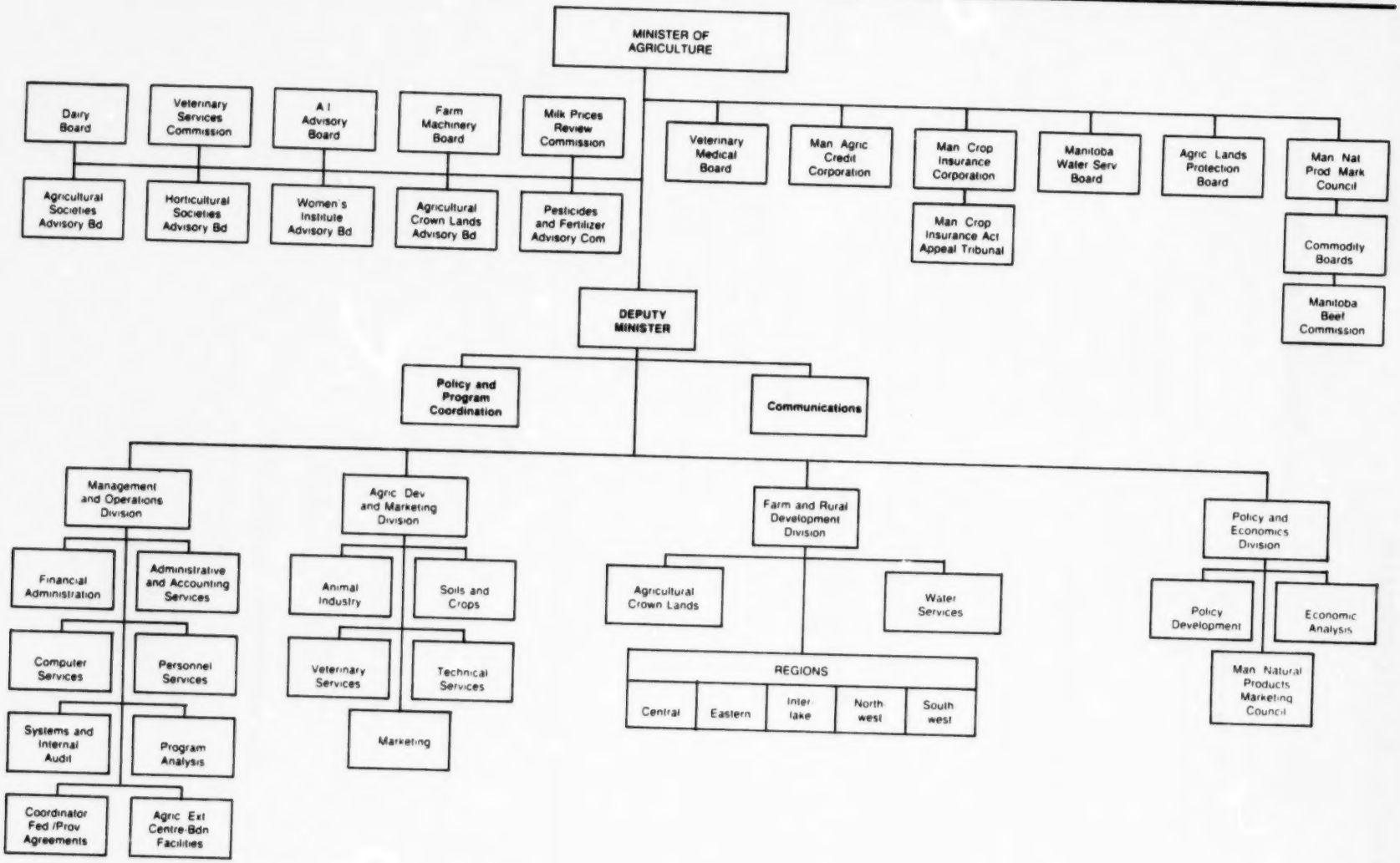
C. Lee, Assistant Deputy Minister
Policy and Economics Division

B. Dryburgh, Policy and Program
Coordinator

Directors

Administrative and Accounting Services —
R.L. Baseraba
Agricultural Crown Lands — J.L. Neabel
Animal Industry — F.P. Baker
Communications — V.E. McNair
Economics — H. Campbell
Marketing — A.E. Gascoigne
Personnel Services — D.H. Burch
Soils and Crops — G.D. Webster
Technical Services & Training — R.M. Deveson
Veterinary Services — J.A. McPhedran
Manitoba Natural Products Marketing Council —
G.H. McKenzie
Manitoba Water Services Board — W.E. Griffin
Central — B.F. Manning
Eastern — D.I. Donaghy
Interlake — A.T. Dickson
Northwest — R. Chychota
Southwest — W. Digby

Organization Chart — Manitoba Agriculture



General Administration

Manitoba Natural Products Marketing Council

The Manitoba Natural Products Marketing Council administers *The Natural Products Marketing Act* and supervises producer boards and marketing commissions. The Council's supervision came through regular meetings with representatives of the producer boards and marketing commissions. It also read minutes, financial statements and gave prior approval of various amendments to Quota Orders, Administration By-Laws and Levy Regulations.

The Council met 20 times in 1985/86. Its involvement with producer boards and marketing commissions is as follows:

The Manitoba Beef Commission — The Council heard three appeals on termination of contract (two were granted) and deficiency payments (one was dismissed).

Council suggested that the Commission clarify its stabilization payment policy on basic cow number changes and also identify exemption provisions from the marketing limits.

The Manitoba Broiler Hatching Egg Commission — The Council approved a number of Regulations for the Commission: A Broiler Breeder Laying Hen Quota Order, Penalty Levies Regulation, Registration Order and an Administration Fee Regulation.

The Manitoba Chicken Broiler Producers' Marketing Board — the Council approved amendments to the Chicken Broiler Quota Order. These established cycle lengths and maximum allotments per cycle for cornish game hens, regular broilers and roasters. The Council also approved a 0.07¢ increase in the provincial levy.

The Council, as a signatory to the National Chicken Marketing Plan, appealed the method used by the Agency to arrive at the 1986 provincial market shares.

The Manitoba Egg Producers' Marketing Board — The Council approved several minor amendments to the Laying Hen Quota Order, the revised Administration By-Law, Pullet Production Quota Order and Pullet Penalty Levies Regulation.

Besides being actively involved as a signatory to the National Egg Marketing Plan, Council heard one appeal against the board. (It was dismissed.)

The Manitoba Hog Producers' Marketing Board — The Board asked Council either to supervise or conduct the election of delegates in District 7. Council met with the Board to discuss its concerns. It was agreed that the Board would conduct its own election, and an update to the Administration By-Law will be completed within the next year.

The Manitoba Honey Marketing Board — The Council's only involvement with this Board was the approval of the members' per diem and expense allowances.

The Manitoba Milk Producers' Marketing Board — The most significant issue was the milk quota transfer policy. Numerous meetings were held with the Board and D.H.I. Associations to consider various policy options. The issue remains under discussion.

The Council approved the Board's first Quota Order. It combined many current policies into one document, and introduced bankruptcy or receivership provisions. The re-allotment of quota to non-related persons was the one area not dealt with.

There were seven appeals against the Board. Council granted two and dismissed five.

The Manitoba Turkey Producers' Marketing Board — The Council raised a number of concerns over Board approved quota transfers. It continued to express the need for the Board to develop a turkey breeder quota policy.

The Manitoba Vegetable Producers' Marketing Board — The Council approved the appointment of Keystone Vegetable Growers' Association and Chipping Potato Growers Association as agents of the Board for the removal of surplus potatoes for 1985/1986.

Council met with representatives of the Board to discuss proposed amendments to the Quota Order, for an open quota policy, as approved at the Annual Meeting. These amendments were still pending.

The Manitoba Fluid Milk Commission — No issues came before Council during the year.

Management Services

Administrative and Accounting Services

The Branch provides professional management, accounting and administrative support services to Departmental programs. Major services include financial analysis; general management consultation; system design and implementation; payment documentation and expenditure recording; revenue collection; control and analysis; coordination of summer student recruitment, records management, office space and equipment, and telecommunication services.

Activities during the year were:

- 22,748 payment vouchers were processed representing $62,429,238.00 of expenditure
- 1630 requisitions were authorized for office supplies, and office equipment

- $7,508,048.00 in revenue was processed as fees for services, shared-cost receipts and miscellaneous
- approximately 60 contracts were prepared with various organizations for Agri-Food programs throughout the province
- 97 summer students were recruited, representing 57 S.T.E.P. students for 780 staff weeks and 40 budget students for 569 weeks.

The 1985/86 fiscal year continued to expand the idea of involving our service role with the program areas, to prevent administrative and management problems.

Internal Audit and Systems

The major role involves planning and the review of existing and proposed financial and procedural program systems of the Department and its agencies. Internal audit and systems is also a resource to senior management. It contributes to policy-making by advising on efficient and effective program delivery.

Activities for the year included:

- undertaking audits of several programs and making recommendations which resulted in more economic, efficient and effective operations
- providing information for the Department of Finance on our present revenue policy. This has identified the need for a complete review of the area. Recommendations to be implemented in the coming year will provide a more consistent and effective policy.
- analysing the capital, operating results and budget of the Keystone Centre
- working with various boards and committees to ensure compliance with program policies of the Province. This resulted in a recovery of a significant overpayment made to clients of the Manitoba Hog Income Stabilization Plan.
- ongoing input to a new computer system being developed for the Veterinary Drug Centre.

Financial Administration

Financial Administration provided support to all divisions of the Department. Activity centered on annual estimates, sessional notes, cash flows and supplementary estimates.

The Department's annual estimates for the 1986/87 fiscal year were compiled through cooperation with all directors. Estimates were presented to the Minister and Executive for review before Cabinet presentation.

Sessional notes, describing the budget details for discussion by the Minister in the Legislature were prepared, along with financial appropriation details.

Emphasis continued on estimating the monthly cash flow of expenditures and revenue for programs, to make reporting more effective.

Revised and supplementary estimates for the 1985/86 fiscal year were compiled for unforeseen and emergency expenditures.

Financial reports, expenditure codes, unique codes and other related matters were developed.

Department of Agriculture

Expenditure Summary By Appropriation

Year Ended March 31, 1986

Appro. No.	Service	1985/86 Actual ($)	Estimate ($)	Variance ($)	Explanation Number
03-1	Administration and Finance				
	(a) Minister's Salary	18,112	19,600	(1,488)	
	(b) Executive Support				
	Salaries	258,313	247,900	10,413	
	Other Expenditures	125,324	116,000	9,324	
	Policy Studies	102,706	175,000	(72,294)	1
	(c) Communications Branch				
	Salaries	379,296	436,600	(57,304)	2
	Other Expenditures	328,283	351,200	(22,917)	
	(d) Financial and Administrative Services				
	Salaries	603,106	674,900	(71,794)	2
	Other Expenditures	57,981	70,100	(12,119)	
	(e) Computer Services				
	Salaries	172,368	153,000	19,368	2
	Other Expenditures	58,542	59,300	(758)	
	(f) Personnel Services				
	Salaries	133,191	176,000	(42,809)	2
	Other Expenditures	22,005	21,200	805	
	(g) Program Analysis				
	Salaries	163,689	164,400	(711)	
	Other Expenditures	9,367	14,100	(4,733)	
	Total 03-1	2,432,283	2,679,300	(247,017)	
03-2	Manitoba Crop Insurance Corporation				
	(a) Administration	4,463,927	4,380,400	83,527	
	(b) Canada-Manitoba Waterfowl Damage Compensation Agreement	1,061,847	300,000	761,847	3
	Total 03-2	5,525,774	4,680,400	845,374	
03-3	Manitoba Agricultural Credit Corporation	11,090,260	7,486,700	3,603,560	4
03-4	Agricultural Development and Marketing Division				
	(a) Administration				
	Salaries	80,697	79,100	1,597	
	Other Expenditures	6,260	6,300	(40)	
	(b) Animal Industry Branch				
	Salaries	1,465,161	1,633,300	(168,139)	2
	Other Expenditures	651,518	707,200	(55,682)	
	(c) Veterinary Services Branch				
	Salaries	1,241,540	1,258,300	(16,760)	
	Other Expenditures	937,102	911,000	26,102	

Department of Agriculture

Expenditure Summary By Appropriation

Year Ended March 31, 1986 (Continued)

Appro. No.	Service	1985/86 Actual ($)	Estimate ($)	Variance ($)	Explanation Number
	(d) Soils and Crops Branch				
	Salaries	1,750,173	1,837,000	(86,827)	2
	Other Expenditures	1,030,571	1,148,600	(118,029)	5
	Northern Development Agreement — Provincial				
	Salaries	51,037	47,500	3,537	
	Other Expenditures	39,148	64,600	(25,452)	
	(e) Technical Services and Training Branch				
	Salaries	1,227,944	1,309,100	(81,156)	2
	Other Expenditures	1,111,598	1,229,100	(117,502)	
	Agricultural Societies	666,690	689,800	(23,110)	
	Northern Development Agreement Canada-Manitoba				
	Salaries	79,544	92,100	(12,556)	
	Other Expenditures	36,663	44,100	(7,437)	
	Less: Recoverable from Northern Affairs	(116,207)	(136,200)	19,993	
	(f) Marketing Branch				
	Salaries	202,480	285,600	(83,120)	2
	Other Expenditures	226,493	227,400	(907)	
	Total 03-4	10,688,412	11,433,900	(745,488)	
03-5	Farm and Rural Development Division				
	(a) Administration				
	Salaries	80,697	78,900	1,797	
	Other Expenditures	7,040	4,800	2,240	
	(b) Northwest Region				
	Salaries	1,152,680	1,183,100	(30,420)	
	Other Expenditures	304,027	370,700	(66,673)	
	(c) Southwest Region				
	Salaries	1,410,592	1,441,000	(30,408)	
	Other Expenditures	302,172	338,400	(36,228)	
	(d) Central Region				
	Salaries	1,511,477	1,515,600	(4,123)	
	Other Expenditures	323,985	338,100	(14,115)	
	(e) Eastern Region				
	Salaries	918,374	920,500	(2,126)	
	Other Expenditures	229,644	250,300	(20,656)	
	(f) Interlake Region				
	Salaries	1,063,714	1,078,300	(14,586)	
	Other Expenditures	283,131	297,600	(14,469)	

Department of Agriculture

Expenditure Summary By Appropriation

Year Ended March 31, 1986 (Continued)

Appro. No.	Service	1985/86 Actual ($)	Estimate ($)	Variance ($)	Explanation Number
	(g) Manitoba Water Services Board				
	Salaries	1,131,350	1,243,400	(112,050)	2
	Other Expenditures	522,470	491,700	30,770	
	(h) Agricultural Crown Lands Branch				
	Salaries	1,090,294	1,197,100	(106,806)	2
	Other Expenditures	1,180,695	1,232,200	(51,505)	
	Total 03-5	11,512,342	11,981,700	(469,358)	
03-6	Policy and Economics Division				
	(a) Administration				
	Salaries	79,543	79,200	343	
	Other Expenditures	13,750	8,900	4,850	
	(b) Policy Development Branch				
	Salaries	174,473	247,400	(72,927)	2
	Other Expenditures	32,382	68,300	(35,918)	
	(c) Economic Analysis Branch				
	Salaries	284,969	378,100	(93,131)	2
	Other Expenditures	48,899	47,000	1,899	
	(d) Manitoba Natural Products Marketing Council				
	Salaries	120,275	145,700	(25,425)	2
	Other Expenditures	36,941	43,700	(6,759)	
	(e) Milk Prices Review Commission	45,214	45,600	(386)	
	(f) Manitoba Farm Lands Ownership Board				
	Salaries	102,339	130,500	(28,161)	2
	Other Expenditures	27,302	33,200	(5,898)	
	(g) Agricultural Research Grant (University of Manitoba)	875,500	875,500	—	
	Total 03-6	1,841,587	2,103,100	(261,513)	
03-7	Federal-Provincial Agreements				
	(a) Value-Added Crops Production Agreement	732,778	894,700	(161,922)	
	(b) Agri-Food Agreement	715,799	800,000	(84,201)	
	Total 03-7	1,448,577	1,694,700	(246,123)	
03-8	Income Insurance Fund	9,121,833	7,259,900	1,861,933	6
03-9	Drugs and Semen Purchases	4,811,224	4,989,900	(178,676)	
03-10	Expenditures Related to Capital Assets				
	(a) Capital Grants	3,956,947	3,920,000	36,947	
	Total 03 Department	62,429,239	58,229,600	4,199,639	

Explanatory Notes For

Expenditure by Appropriation Summary

Year Ended March 31, 1986

1. Several anticipated studies were not undertaken. Staff did some of the required economic background work.
2. Reflects unused salary funds due to temporary staff vacancies.
3. The heavy rain in summer and fall, combined with an early snowfall, resulted in a late harvest. Many crops were in the fields later than usual, and heavy damage was caused by migratory waterfowl.
4. The net increase was attributable to the cost of the "Interest Write-Down" program of $6,303,000 which was not part of the 1985/86 estimates. There were several major offsetting items. (a) Some producers under the Young Farmer Rebate program were unable to meet the terms of the agreement and therefore were not eligible for rebates. (b) Guaranteed loan-loss claims were lower than budgeted. (c) The Corporation's revenue was higher than anticipated.
5. Expenditures under the Soil Testing Program were much lower than expected. Very wet fields in the fall of 1985 made it virtually impossible for many farmers to obtain soil samples.
6. The net increase in expenditures is primarily due to assistance to Sugar Beet Producers of $2,014,400.

Personnel Services

Personnel Services advised management and staff on the recruitment and selection of employees, wage and salary administration, employee relations, staff development and training, Affirmative Action, and Workplace Safety and Health.

Personnel Services continued to provide leadership and direction to the Department's "Management Update" training and development program to enhance management skills. Last year, Personnel Services developed the management philosophy statement and delivered the initial training sessions. Work within the Manitoba Crop Insurance Corporation, Manitoba Agricultural Credit Corporation and the Manitoba Beef Commission revolved around wage and salary system development and organizational development needs.

Computer Services

The Computer Services Branch continued to provide for the maintenance, development and optimal use of computerized systems within the department.

Ongoing systems include dairy herd improvement, soil testing analysis, soil information, Crown Lands administration, agricultural credit and loans, crop insurance, financial administration, budget information, beef marketing and stabilization, farm land sales, subdivision of farm lands, home study courses and 4-H records.

Development started for the following systems: veterinary drug order/entry, rural water engineering and drafting, and financial counselling.

The branch continued to provide service to department staff for statistical analysis, graphics, procurement/installation/maintenance of hardware and software, the administration of electronic data processing funds, and the management of word processing services.

Program Analysis

Program Analysis activities for the year centred around four major areas: (1) helping individual staff, branches, regions or divisions to evaluate the efficiency and effectiveness of departmental programs and activities; (2) assisting the financial administrator, departmental directors and managers to prepare budget estimates, revenue expectations and financial control for departmental and government review; (3) providing departmental management with specific program activity reviews, evaluations and recommendations; (4) cooperating with the federal-provincial coordinator on planning, development and financial control of the Agri-Food Development Agreement under ERDA; and completing the evaluation report of the Value-Added Crops Production Agreement (Agro-Man).

Management continued to place increased emphasis on planning, reporting and evaluation. More emphasis was placed on showing the linkage of all activities in the department to the major programs and objectives of the department. The environment in which the department operated, particularly as it related to farm income, greatly affected programs and activities.

A summary of Manitoba Agriculture Policies and Programs was updated and made available. An update to the "Catalogue of Government Grants Available to Municipalities" was completed.

Activity reviews were completed on the Feed Laboratory and Soils Laboratory in relation to their service and education functions.

The branch coordinated 10 regional meetings with staff and farmers, with the Minister and/or departmental executive. Policy was explained at all meetings. In addition, similar meetings were coordinated for the Veterinary Services Branch, Crown Lands Branch, Manitoba Water Services Board, Marketing Branch, Technical Services and Training Branch, Policy and Economics Division and Management and Operations Division.

The Branch maintained close liaison with directors and program managers on development of program information support for the departmental budget estimates, and assisted directors in controlling budgets.

Agricultural Research

University of Manitoba

During the fiscal year, Manitoba Agriculture provided a grant of $875,000 to the University of Manitoba to support the University's agricultural research program. The grant was used for the development and maintenance of the University's central research station at Glenlea. Funds were also used to provide operational support for research projects in all major disciplines. These included agricultural engineering, animal science, entomology, food science, plant science and soil science.

Manitoba Agricultural Services Coordinating Committee (MASCC)

Staff from the Department participated in the activities of the Manitoba Agricultural Services Coordinating Committee (MASCC). MASCC is an advisory body which recommends methods to improve the quality of agricultural services to the farmers and others in the agricultural industry. The Committee is chaired by the Deputy Minister of Manitoba Agriculture. It includes representatives from the University of Manitoba. Input into the forming of recommendations is also provided by farmers and representatives from agri-business.

In 1985/86, MASCC approved recommendations on both research and non-research development. Recommendations of national significance were forwarded to the Canadian Agricultural Services Coordinating Committee (CASCC). Those primarily of provincial significance went to provincial agencies, including the Department of Agriculture, for consideration and implementation.

General Support Services

The Prairie Agricultural Machinery Institute (PAMI)

Evaluation — The major evaluation activities of PAMI's Portage station centred on haying equipment. Testing was completed on two round balers, two disc mower conditioners, two round bale movers, one rake and one front-end loader attachment for bale handling. Work also continued on zero-till drills.

Evaluation of grain cleaners, grain augers and auger safety devices was completed. Evaluation reports were distributed.

Six evaluation reports were distributed, and a further 10 reports were under preparation at the end of the year.

Development — The active development program at Portage included sponsored projects such as the Agriculture Canada contract (AERD) on an eccentric grain cleaner. Work continued on a second AERD contract for a three-year study on the performance of three types of zero-till drills. Under this contract, functional assessment reports were distributed for two of the drills; durability was monitored, and the Plant Science Department of the University of Manitoba carried out agronomic studies.

Three projects were completed with the Field Simulation Laboratory. These include sprayer boom vibration analysis, an instrumentation durability test and a swather frame stress management test at critical points.

Other projects included: preparation of an operator's manual for a PAMI designed drill marker, technical support for a whole-crop harvesting experiment, draft measurements for a tillage study by the University of Manitoba, measurement of impact deceleration for a recoverable target vehicle, no-till drill support for winter wheat seeding, studies on the corrosive effects of ammonium sulphate on sprayer components, and modifications and improvements to a plot combine and plot seeder. In total, $94,000 was billed for development services throughout the year.

Extension — Portage Station extension activities included a display booth at the Canada Farm Progress show, Brandon and Winnipeg Weed Fairs and the annual conference of the Prairie Implement Manufacturers Association in Winnipeg. Station tours were carried out for the Canada Grains Institute, Manitoba agricultural representatives and Central Region weed supervisors. Plot tours were also organized with the sponsorship of a herbicide company.

Clinics on combine operation and adjustment were hosted at three Manitoba locations in February. Total attendance was about 500. A "gleaning" report was issued on the causes of PTO vibration. An equal angle hitch display was designed and built for the Farm Progress Show. Participation in other media included radio, TV, a video production on Manitoba farm equipment manufacture, and a slide/tape show on no-till drill evaluation presented at the Manitoba-North Dakota Zero-Till Workshop.

Research — The Portage research program included evaluation of a promising Australian zero-till machine called the Connor Shea Coil Tyne drill. This machine is not yet available in Canada. However, station testing and a comparative test with other machines, carried out by the Manitoba Agriculture Grassland Section, indicated significant advantages for the Connor Shea drill.

The government of Manitoba made a grant of $469,800 to PAMI for the year 1985.

Manitoba Farm Machinery Board

The Manitoba Farm Machinery Board and administrative staff administer *The Farm Machinery and Equipment Act*. This involves the Board in all segments of the farm implement industry: producers, dealers, manufacturers and distributors. The Board, through staff, provides a resource base for information and advice.

A prime concern of the Board is to help producers experiencing problems related to farm machinery. Producers' commitment to farm machinery continues to increase, both in capital cost and field use. Because of the importance of this reliance, staff try to resolve problems with an immediate response.

Repossession — Lenders using lien notes as security documents are required to receive permission from the Board before repossession can occur. During the year, 118 applications for leave to repossess were submitted to the Board for judgment. This was down somewhat from the previous year and would indicate that Manitoba producers are persisting in their attempts to strengthen the equity base of their farm operations.

Financial counselling and debt payment re-scheduling continued to be of utmost importance. Under Board direction, staff aggressively re-negotiated payment schedules compatible with cash flow.

Complaints — The Board received 111 registered complaints. Each complaint was investigated and resolved, often through a negotiated settlement.

The major areas of dispute were:

— an alleged failure of a farm machine to perform its intended function

— prior evidence of a mechanical problem, but failure occurring after the expiration of warranty

— the unavailability of repair parts during critical periods in the production cycle

— contractual disagreement between purchaser and seller.

— The board also counselled and advised producers on ways to settle disputes arising from used machinery purchases (even though used equipment is exempt from the Act)

Total farm production capacity depends directly on operating equipment. When failure occurs, the Board strives to respond with immediate assistance.

Licences — On March 31, 1986, the Board had 426 dealer licences and 162 vendor licences in effect. One requirement of licencing is that a "Penal Bond" of a designated amount must be in force. The Board provides a bonding service through the Farm Machinery and Equipment Act Fund, administered under direction of the Board. Under the Fund, 72 dealer bonds and 31 vendor bonds were issued.

Dealer Inspection — During this fiscal period, the Board's inspector completed 115 inspections. The Board affected a major "Dealer Inspection" policy change. Henceforth, all major franchised dealers will be inspected annually. This gives the Board an opportunity to discuss areas of mutual concern as they become current.

Board Activities — The Manitoba Farm Machinery Board held seven Board meetings, two credit committee meetings and 36 arbitration meetings during the year. Arbitration meetings were held throughout the Province to resolve complaints and to investigate applications for leave to repossess when in depth discussion and negotiations were necessary.

Manitoba hosted the annual Inter-Provincial Administrators' meeting. Representatives from Alberta, Saskatchewan, Ontario and Manitoba assembled in Winnipeg to exchange opinions on their respective Acts. They also undertook a comprehensive review of the North American farm implement industry.

Farm Implement Industry — Rationalization within the industry continued at an accelerated pace. Mergers and buy-outs consolidated the industry into fewer, but financially stronger, operating units. While the old traditional names remain, ownership and management have passed to new companies. Manufacturers continue to struggle for survival and realism dictates that additional changes are inevitable.

Manitoba's dealer network enjoyed increased sales during 1985/86, mainly due to the favorable harvest throughout the province. The past trend of dealership reductions has now abated, indicating the Manitoba dealer count may become more stable.

Communications

The Communications Branch continued to coordinate most of the department's communication services. A wide range of communication services are designed to support all policies, programs and activities of the Department. Direct general support is provided daily through the mass media. Support services are provided to other staff through print media, audio visual productions and a wide range of instructional and communication aids.

For the first complete year, regional communication staff and services were a part of the Communications Branch. By year's end a plan was in place to provide more support from the Branch.

Communication strategies continued to provide the framework for the priority program support. Strategies were developed through close liaison with program managers. These proved to be useful in executing planned communication activities on priority areas.

Print Services

Press — The weekly issue of a press package continued to be the mainstay of the Department's press service. During the year, 263 releases were issued to over 800 recipients. Farm press and community weekly newspaper pick-up continued at a high level. Internal information sheets called Intercom were issued to all Departmental staff regularly. Specialized press coverage was provided for such major activities as Weed Fairs, Hog Days, Animal Health '86 homestudy course and the Manitoba Beef Commission program.

Publications — In producing nearly 300 print projects during the year, the services of publications staff ranged from writing, editing and design to printing arrangements and distribution. Productions included publications, technical bulletins and factsheets. An increasing emphasis on factsheets is noted year by year. Other print production included the design and printing of forms, letterheads, charts and maps.

Audio Visual Services

Radio — The department's long running farm radio feature "Country Comment" continued to be produced and broadcast weekdays on eleven stations serving rural Manitoba. Timely agricultural information was provided through that program to a surveyed adult audience of 30,000 per day. Food-related consumer information was provided on "Consumer Update," supplied by marketing board home economists.

Several special radio series were produced, including a 16 item series provided on the Animal Health '86 homestudy course and heard on eight Manitoba stations.

Television and Film Production — Activity in this area during the year was limited. Short filmed television items were provided periodically for TV use, especially in the western regions. Other TV activity involved arrangements for interviews and recommending suitable agricultural items to station personnel.

Graphic Design — Communications staff facilitated design production through centralized services and were able to provide client support for such services.

Still Photography — The department's still photo library is in continual demand for visual requirements for television, publications, slide sets, homestudy lessons, displays and the press. Additions are made to the collection each year to keep it current. Material from this library was used in the production of five departmental slide/tape sets in the past year.

Audio Visual Library — The Branch's Distribution Centre stocks about 250 films and slide sets for use primarily by staff, community groups and schools. Bookings of these materials during the year totalled 1100.

Promotion and Advertising

The Communications Branch continued to handle most advertising done on behalf of the whole Department. This included advertising on many special projects and an increasing volume of regional advertising. In total, the Branch handled 162 advertisements. During the year, major advertising and promotion activity was carried out on tissue testing, fall soil testing, the Manitoba Beef Commission, Hog Days, Weed Fairs, Animal Health '86 homestudy course and the annual Outlook Conference.

Animal Health '86

The Animal Health '86 course was the seventh annual homestudy course produced and coordinated by Manitoba Agriculture. The regular pattern of eight lessons was extended this time to 14 to cover all types of animals commonly found on Manitoba farms. A farmer registration of 1550 indicated a successful course. A follow-up study showed strong support for the Animal Health course. A very high percentage of respondents said they would take further courses offered in the homestudy pattern.

Telidon

The Department maintained its involvement in the Grassroots telidon service by providing about 600 pages on the data base and through 22 Departmental offices equipped with receiver terminals. Current information on the data base was updated on a bi-weekly basis.

Economics

Staff of the Economics Branch compiled, analyzed and disseminated statistics, marketing and production information on Manitoba's agricultural commodities. These were for producers, departmental and governmental staff, agribusiness and the public. The Branch provided briefing papers and support to the department executive. Resource support was used for program review, development and evaluation, plus market analysis and price forecasting.

The Branch was also responsible for providing leadership and coordination of long-term policy and program developments within the Department.

Statistics

The Statistics section's major responsibility was to acquire and provide selected data on Manitoba agriculture. Together with the Analysis section, Statistics provided assistance in the preparation of final estimates for many of the crop and livestock statistics released by Statistics Canada. Several surveys were conducted by the section with other branches of the Department and Statistics Canada.

During the year, the following publications were prepared and distributed:

- 1984 Yearbook of Manitoba Agriculture
- Monthly Agricultural Conditions Reports
- Weekly Crop Reports
- statistical reports on farm finances such as receipts, expenses, income value of production, bankruptcies, land values, wages and price indices
- statistical reports on crop and livestock production
- reports on corn, vegetables, special crops and herbicides compiled from surveys carried out by the section.

Analysis

Analysis staff were responsible for the research and provision of market information, analyses and forecasts for major agricultural commodities and food. Supply, demand, price and impact analysis, and price forecasting were included. Manitoba Agriculture's Outlook Conference held in January in Brandon and Winnipeg provided a regionalized view of future prospects for the industry. The analysis of domestic and international markets was disseminated to staff, farmers and agribusiness through the Manitoba Markets Weekly Report. This provides up-to-date market information on crops and livestock for periodic outlook reports, media interviews, Telidon, and numerous regional meetings and seminars held throughout the province.

In addition, the section also analyzed the general economy and its impact on Manitoba's agricultural sector.

Policy Analysis

The Policy Section conducted research and analyzed issues, concerns, problems and trends in agriculture. It also assisted in the long-range policy and program planning of the Department. These responsibilities included:

- analysis of conditions and factors affecting the agricultural and rural community
- evaluation of departmental programs and policies, and their impact on the agricultural economy
- participation in negotiations and discussions on inter-departmental and intergovernmental projects and agreements.

During the 1985/86 fiscal year, major emphasis was placed on:

1) evaluation of various alternatives for national quota allocations as related to supply-managed commodities
2) participation in preparing additional material for the United States Department of Commerce countervailing hog duty petition and the subsequent follow-up by United States authorities
3) participation in the analysis and preparation of a discussion paper on *The Western Grain Transportation Act*
4) participation in the analysis and dissemination of information related to the National Tripartite Stabilization Plans
5) assisting the Water Resources Branch in evaluating the economic effects of selected development projects
6) analysis of various proposed agricultural resource development and conservation programs under the Economic and Regional Development Agreement (ERDA)
7) assisting the Crown Lands Branch in land improvement studies
8) participation in studies relating to northern agriculture
9) participation in three of the six federal/provincial working groups established by the Ministers of Agriculture. The six groups identified were: agricultural development, trade policy, disaster relief, soil and water technology, research and technology transfer, and farm finance. These working groups have held several meetings throughout the year to identify concerns, principles, priorities and directions. Their reports will be made to the Ministers during 1986/87.

Manitoba Fluid Milk Commission and Manitoba Milk Prices Review Commission

The major areas of activity of The Manitoba Milk Prices Review Commission continued during 1985/86 to include the following:

- setting the minimum and maximum retail price to consumers of fluid milk in Manitoba
- monitoring and maintaining a producer cost of production formula for fluid milk production
- setting the producer price for fluid milk (class 1 price).

During 1985/86, the Commission conducted a review of the milk price control system implemented in June 1984. It was reviewed in terms of current prices and system format.

The review was requested by the processing and retailing trades. It involved extensive examination by the Commission of various presentations from the trades. As a result of the review, modifications were deemed necessary. They were implemented on September 6, 1985.

The new wholesale prices represented an increase over the previous prices of 1 to 3 per cent for two per cent milk and 2.5 to 4 per cent for homogenized milk. This reflected compensation for the cost of the additional butterfat. For consumers in the designated areas of Winnipeg-Selkirk, Brandon and Winkler, the price of homogenized milk rose 3 to 3.5 per cent, with two per cent milk up to 2 to 2.5 per cent. Due to escalating transportation costs and resulting adjustments in rural transportation allowances, rural retail

prices were increased. For example, two per cent milk, the most popular type of fluid milk consumed in the province, increased in retail price by approximately 5 to 6 per cent. The price of buttermilk was deregulated at all levels of the control system. In addition, a minor reduction was made to the maximum wholesale reduction allowed within the system to retailers and other wholesale purchasers of fluid milk.

System modifications to the Northwest Region of Manitoba and a small area northwest of Winnipeg became effective August 12, 1985. These adjustments were necessary because of the decision of the Dauphin processor to discontinue processing of fluid milk. As a result, the control system lost a designated area (location in which fluid milk is processed) upon which surrounding rural area prices are based. Therefore, the wholesale and retail prices for all locations in the Dauphin area had to be readjusted. The basis was the distance from either Brandon or Winnipeg, which are now the locations of the nearest fluid milk processing plants.

Late in 1985/86, an informal agreement was reached by all Manitoba and Saskatchewan milk processors normally selling fluid milk across the Manitoba-Saskatchewan border. The three processors agreed that when selling milk in the neighbouring jurisdiction, all transactions would occur according to any existing provincial milk price regulations. Since milk price controls now exist in both provinces, the Commissions supported the agreement which had the potential to lend a measure of support to both provincial programs and their respective objectives.

Throughout 1985/86, surveillance of retail prices in Winnipeg, by random spot-checks, was conducted by Commission personnel, while the Manitoba Women's Institute assisted in this activity in rural Manitoba. While no court actions were necessary, retail price-related complaints were investigated with the assistance of the Manitoba Natural Products Marketing Council's Inspector, as required.

The Commissions met 11 times during 1985/86. In addition, discussions were held with officials and representatives of Manitoba Agriculture, the Manitoba Milk Producers' Marketing Board, the six Manitoba processors, the Manitoba Milk Producers' Co-op Inc., the Canadian Federation of Independent Grocers, the independent milk distributors and jobbers, the Consumers Association of Canada and many individual consumers and retailers. Such extensive interaction with the industry is considered necessary by the Commissions in order to fulfill their combined mandates of a stable, healthy fluid milk industry offering a continuous supply of fluid milk to consumers at reasonable prices.

Marketing

The Department's marketing staff are responsible for market development, promotion and marketing services for Manitoba's agricultural and food products.

Their mandate is to:

- identify and develop new markets and assist in the maintenance and expansion of present markets for Manitoba agricultural commodities
- encourage and assist agri-business to expand markets for their agricultural products grown or processed in Manitoba
- improve and enhance the demand for provincially grown agricultural food products
- undertake these activities provincially, nationally or internationally.

During 1985/86, the Marketing Branch continued to be active in coordinating and hosting visiting missions to our province. Twenty missions came to Manitoba and included government and industry officials from Japan, China, Mexico, Germany and Korea.

Outgoing foreign market development missions from the Branch visited Japan (two) and China. During one of the missions to Japan, the staff coordinated two seminars at which industry representatives from Manitoba assisted in the presentation of Manitoba pork to Japanese retail meat managers and buyers. Mission members also viewed a retail Manitoba pork promotion with Japanese stores, using large full-colour banners supplied by the Branch. These banners carried the message "Enjoy The Great Taste of Manitoba Pork."

On the domestic scene, the Branch again coordinated the annual Manitoba Food Products Event. This year's event was the 12th consecutive promotion of this nature, and again was very well supported by the food industry throughout the province. Support material provided to retailers by the Branch included full-colour in-store promotional kits, featuring 14 different commodities as well as shelf markers and price cards. Again, a major component of this promotion was the special grocery check-stand bags used by retailers across Manitoba. Over 3.5 million bags were distributed, carrying the message "Enjoy The Great Tastes of Manitoba." As well, the bags contained an entry form and contest information for $1,000 worth of Manitoba food products to be presented to lucky winners. Television commercials supported the promotion in all areas of the province.

Numerous other promotions were undertaken and coordinated by Marketing staff in conjunction with marketing boards and producer associations. These included displays in Winnipeg, Brandon and Steinbach, with product sampling and/or informational material available for consumers.

Support was also provided to Manitoba agricultural commodities through staff involvement and participation in trade shows, including the Canadian Fruit and Vegetable Wholesalers Convention in Toronto; Canadian Western Agribition in Regina; Ag Ex and the Manitoba Royal Winter Fair in Brandon and Hog Days in Winnipeg.

Support to Manitoba's livestock breeding stock industry was undertaken through advertisements in livestock publications domestically and internationally.

Over the years the Department's Marketing staff has provided support to producer groups and associations in the development of marketing brochures. During this year such publications were developed in support of U-pick and fresh vegetable stands, U-pick strawberry maps and recipes, light veal, "More Meals in Minutes" recipes, a Fresh For Flavor calendar, a vegetable availability chart, a nursery and landscape directory and a general brochure on Manitoba for Japanese customers.

Again, the Manitoba Food Products Directory was produced and distributed locally, nationally and internationally, including copies to all Canadian Embassies and Consulates.

The Marketing Branch worked closely with the Canadian Food Products Development Centre at Portage la Prairie and also the Food Science and Foods and Nutrition Departments at the University of Manitoba, in an ongoing effort to develop new products and technology for Manitoba food products.

The Manitoba Water Services Board

Municipal Water and Sewage Services

The Manitoba Water Services Board is responsible for water related activities through the following programs.

1. **Municipal Water and Sewage** — The Manitoba Water Services Board provided technical assistance on 69 ongoing municipal projects during the past year. Grants totalling approximately $3,864,440 (Regular Budget $2,784,704, JOBS FUND $1,079,736) were provided. Eighteen projects were substantially completed during the year.
2. **Community Water Source Development** — Technical assistance was provided on 41 projects. A total of approximately $107,924 in rebates was paid on 34 projects by The Manitoba Water Services Board to local governments for the development of water sources from which farmers and community residents may haul or pipe water.
3. **Agricultural Community Water and Sewage** — The Manitoba Water Services Board provided technical assistance on six community projects during the past year. Rebates totalling approximately $80,904 were provided to local authorities for five projects undertaken.
4. **Agricultural Area Water Pipeline** — During the past year one proposed pipeline project was installed, involving a total of three miles of pipeline, to provide water to one community.

On-Farm Water Services

1. **Water Source Development** — Technical assistance for farm water source development is available, as required to solve serious water problems through farm calls and detailed designs. A total of 1,655 requests for technical assistance were dealt with, while financial assistance totalling approximately $74,617 was provided to 73 farmers to assist in the development of satisfactory water sources in situations that did not qualify for PFRA assistance.
2. **Irrigation** — During the year, a total of approximately $27,670 was provided to 14 farmers to assist in the development of satisfactory irrigation systems.

Dugout Filling

Last year, the equipment rental charge was $300 for filling normal-sized dugouts where the pumping distance is less than one-half mile and $350 for filling normal-sized dugouts where the pumping distance is greater than one mile. A total of 55 dugouts were filled.

Agronomic, environmental and public health monitoring continued on the Roblin Effluent Irrigation system. The major monitoring contract is with the University of Manitoba. Contributions are made by the Departments of Health, Environment and Agriculture.

A detailed report on the above activities can be obtained from the 1985/86 annual report of the Manitoba Water Services Board.

Agricultural Representative Service

A major mandate of the Department is to extend the latest in useful, accurate and timely agricultural information to producers. Manitoba's 40 agricultural representatives provide the vital link between researchers, specialists and farm families. They extend a wide range of information on production, management and marketing.

In recent years, agricultural representatives have played an increasing role in providing counselling on farm management, farm finances and other current areas of need. Now, trained and equipped with computers, they are able to provide this service in a more efficient and effective manner.

As the "front line" staff of Manitoba Agriculture, the agricultural representatives also play a significant role in providing feedback to the Department's administration and specialists. This information includes updates on current conditions in rural Manitoba and current needs for research, testing and other services.

While agricultural technology is a prime concern of these staff members, they are also heavily involved in rural community development through programs that include 4-H clubs, commodity groups, farm business groups and other district organizations.

During the year, Manitoba's agricultural representatives and regional specialists made over 167,000 contacts with Manitoba farmers.

Livestock Management and Marketing

Dairy

Sales to the Manitoba Milk Producers' Marketing Board and provincial creameries reached 289.9 million litres, a decrease of 2.82 per cent from 1984/85. Fluid milk sales were 104.3 million litres, an increase of 1.16 per cent from the previous year. Farm separated cream production was 31.5 million litres milk equivalent, down 2.4 per cent. Industrial milk production was down 5.4 per cent at 154.1 million litres.

Farm Cash Receipts — Dairy farm cash receipts (including subsidy payments) totalled $131.46 million. Payments from the Manitoba Milk Producers' Marketing Board and the creameries reached $120.53 million. This was made up of $115.69 million from milk sales and $4.84 million from farm-separated cream sales. The price paid to milk producers during 1985 averaged $44.75 per hectolitre. Creamery payments for farm separated cream dropped to $4.14 per kilogram.

Subsidy Payments — Subsidies are based on eligible market share quota shipments made within the dairy year. Manitoba Market Share Quota allotment was reduced to 6.624 million kilograms butterfat as of January 1, 1985 and was further reduced to 6.516 million kilograms butterfat on August 1, 1985. The subsidy payment remained unchanged at $6.03/hL for milk testing 3.5 per cent butterfat. The support price for butter was increased to $4.929 per kilogram, an increase of 14.5 cents/kg (3.03 per cent), and skim milk powder to $2.922 per kilogram, an increase of 7.2 cents/kg (2.53 per cent) effective August 16, 1985. Manitoba received $10.93 million in subsidy payments. In-quota levy for milk to cover domestic requirements was $5.14/hL. In-quota levy for milk to cover export requirements was $29.79/hL. Over-quota levy for one per cent over in-quota volume was $29.79/hL. Balance of over-quota production levy was $38.00/hL, up from $34.38/hL.

Breeding

Manitoba Agriculture supports two milk recording services: the Dairy Herd Improvement Association (DHIA) and the Owner/Sampler (O/S) program. The purpose of both is to improve the production performance of dairy cattle in the province. The "Production Dollar Index" (PDI) was again distributed semi-annually to all dairy producers. The report summarizes the most recent production and type information for all proven dairy bulls in Canadian bull studs. Presentations on sire selections and breeding programs were made at producer meetings and four AI courses.

Dairy Herd Improvement Associations (DHIA)

During the year, 14 new herds were enrolled and 12 herds were discontinued for a net increase of two herds in 1985. At year's end, 283 active herds were on the program. The established waiting list consisted of 38 dairy producers interested in joining the program. Three of the discontinuing herds were sold and one transferred to Record of Performance (ROP). The DHIA grant system remained at $2.00/cow/year and 65 cents per herd mile. This grant was paid directly to the 21 DHI Associations in proportion to the number of cows tested and the distance travelled. Annual meetings were held by all 21 DHI Associations, and milk recording staff attended each meeting. Individual training workshops were held with four of the 23 DHIA supervisors in the province.

Owner/Sampler

The Owner/Sampler (O/S) program had a net decrease of one herd in 1985. Although the number of cows enrolled in the O/S program decreased by 166, production per cow increased 105 kg from 5,704 to 5,809 kg. Eight herds transferred to the DHIA program during the year. (Table 1).

Table 1

Owner/Sampler Summary (1984/85)

	1984	1985
Herds on test for 12 months	88	93
New herds on test	27	19
Discontinued herds	23	20
Total herds on test during the year	136	132
Herds on test December 31	113	112
Cows on test December 31	4,576	4,410
Average kg milk per cow	5,704	5,809
Average kg fat per cow	196	200
Average kg protein per cow	185	184
Average BCA milk	118.0	124.0
Average BCA fat	112.0	114.0
Composite BCA	115.0	119.0
Per cent of herds on test	9.7	9.9

National Identification Program (NIP)

This program was initiated by the Joint Dairy Breeders Committee (JDBC) in 1972 and was used by pro-

ducers to identify their grade animals. Effective January 1, 1984, the small NIP card was changed to an 8¼" x 11" NIP certificate, and provisions were made for the transfer of ownership when an NIP animal is sold. The cost of the NIP application was also increased from $2.00 to $4.00/certificate in 1984, which resulted in a decrease in the number of NIP cards processed in Manitoba during both 1984 and 1985. The following list summarizes the NIP applications processed in the past six years:

1980 — 1,834	1983 — 3,605
1981 — 2,587	1984 — 2,685
1982 — 2,796	1985 — 2,071

Nutrition

Twenty-five per cent of the province's dairy producers requested feed analyses and detailed feed recommendations. These consisted of 253 reports on 599 samples submitted. A series of nutrition workshops emphasizing feeding for production and ration balancing were held. Information on feeding and management of dairy bull calves for pink veal production was provided to a number of producers. Holstein clubs held a number of barn clinics, meetings and tours covering all aspects of dairy management.

The butterfat-protein inversion program was continued. Herd owners were informed on how to correct butterfat problems when they occur.

Dairy Laboratory

Microbiology — Producer samples and processed dairy products are tested for total bacteria counts, coliform counts and bacterial inhibitors (antibiotics). Tests for added water in raw and finished products are also performed.

For the year, 20,399 total bacteria counts, 3,482 coliform counts, 21,562 tests for inhibitors and 16,635 tests for added water were made. Yeast, mould and proteolytic counts on butter, keeping quality tests and phosphatase tests on fluid milk products and staphyloccoccus and salmonella counts on cheese were conducted. In total 84,011 analyses were completed.

Milk Composition — Output in this area increased again this year. The main increase was in the DHIA and Owner/Sampler area. This once again more than offsets the decline in producer payment samples that continue to be analysed weekly for milk-fat, protein and lactose. Analyses of all individual cow samples submitted under the Owner/Sampler and DHIA programs were conducted monthly. Analyses of processed dairy products were conducted once weekly. In total, 222,623 analyses were performed.

Chemistry — Manitoba Agriculture continued its program of monitoring herd samples for somatic cell levels to aid in the detection of mastitis. Compositional analyses of various processed products were performed and evaluations of flavor problems in both raw milk and finished dairy products took place. In all, 17,525 analyses were conducted. In addition 300 litres of 1/10N NaOH, 16 litres indicator and two litres .088N $AgNO_3$ were prepared and standardized for use by the dairy plants.

Processor Services

Inspections of Manitoba's dairy plants and depots took place under this activity. In-depth inspections on industrial plants were conducted in conjunction with Agriculture Canada, while inspections of fluid plants were conducted by Manitoba Agriculture. Follow-up inspections were made where necessary. Six hundred and forty (640) plant and depot inspections were completed.

Including seminars and meetings, 163 calls were made to plants regarding product quality. There were 2,730 tests for quality and composition of farm separated cream, and 40 bulk wash up station evaluations conducted. Inspections were made of eight margarine storage facilities and one margarine manufacturing facility. Random sampling and testing of 18 samples of margarine were conducted. Thirteen consumer complaints were received, resulting in ten plant contacts or visits.

Farm and Extension Services

As of March 31, 1986 there were 1,125 milk producers in Manitoba, 23 fewer than March 31, 1985. Average monthly shipments for this period were 20,511 litres compared to 18,875 litres for the year previous. A total of 2,979 farm visits were made; 1,069 were a direct service to producers and 1,910 were routine, including visits to new producers and on-farm extension calls. Owner/Sampler milk samples from two areas in the province are picked up 10 times per year by Farm Services inspectors. Two inspectors are now involved in plant inspection and make routine visits to plants in their areas. Butterfats and flavors are checked at creameries and in-depth inspections are carried out in conjunction with Agriculture Canada staff. Inspections and/or appraisals totalling 254 were conducted on milk transports, milk graders and raw milk sample holding facilities.

The annual three day milk graders course and the four day milk receivers course were held in November with a total of 16 individuals in attendance. All were successful in passing the courses and licenses were issued accordingly. Refresher courses were held in Winnipeg and Brandon for all presently licensed drivers. Staff attendance and/or participation in regional, DHIA, and Holstein Friesian Association meetings with dairy producers served to assist in the continued good quality of milk delivered to processing plants. Discussions on milking equipment, sanitation and testing related to mastitis control has helped to lower somatic cell counts for some producers.

All five regions carried out an on-going program with regional dairy producers. The wide range of activities included production meetings, dairy days, dairy barn tours, demonstrations, correctional mating clinics, classification clinics, A.I. schools and judging clinics. Topics dealt with at these events included nutrition, dairy facilities, breeding management, milk quality, disease control, use of records and other topics. Several of the regions reported very active Holstein Clubs that carried out on-going and effective programs over the year. The semi-intensive on-farm dairy consultation program continues to be carried out. This program involves agricultural representatives, farm management specialists, provincial veterinarians, Animal Industry staff and others from the private sector.

Marketing — Dairy Breeding Stock

Throughout the year, staff of the Marketing Branch assisted local exporters in a variety of ways. This assistance was given to develop pricing and financial quotations for opportunities in Mexico and Iran. A project was initiated for health screening of potential embryo donor cows for possible markets in China. Discussions were held with the Manitoba Holstein Friesian Association with respect to marketing opportunities in Peru and their outgoing mission to that country. Marketing opportunities were also discussed with the Eastern Dairy Cattle Club and the Manitoba Brown Swiss Association.

A market development staff member attended a seminar in Calgary on trade opportunities between Hungary and Canada, at which opportunities for dairy breeding stock were discussed. As well, an outgoing mission was undertaken to attend Ag China '85 in Beijing, China, at which Manitoba's dairy breeding stock industry was discussed and promoted with various agencies.

Marketing — Veal

Staff maintained contact with the Manitoba Light Veal Association, discussing production and potential, market penetration and consumer acceptance. They also provided assistance in the production of an information brochure and recipe sheets. This included testing of all recipes used in the publication.

Staff assisted in researching a marketing program for distribution of veal at the retail and wholesale level. They also met with two major packing house companies regarding the possibility of their killing and cutting Manitoba light veal. One firm agreed to undertake an evaluation.

Dairy Goats

Goat producers continued to participate in the "Official" group testing Owner/Sampler recording program. This program is administered provincially in cooperation with the Canadian Goat Society and Macdonald College, Quebec, with three new herds enrolling in the program.

Beef

The beef cattle industry is an important part of Manitoba's agricultural sector, with farm cash receipts representing 42 per cent of the total livestock sector, and 16 per cent of the total farm cash income. Most regions report that difficult economic times have prompted many beef producers to take steps to improve their efficiency. A large number of producers are enrolled in the Manitoba Beef Stabilization program in an attempt to stabilize their cash flows.

Beef producers include dairy operators, cow-calf operators, cow-calf and feedlot operators or feedlot operators. The vast majority remain, however, cow-calf or cow-calf and feedlot operations. Collectively, these producers maintain a 325,000 beef cow herd (as of January 1, 1986). Fifty-five thousand heifers were retained for replacement purposes.

Nutrition

Approximately 495 detailed feed recommendations based on 952 feed sample analyses were prepared and sent to beef producers. Detailed nutritional recommendations were accompanied by follow-up services including farm calls in response to producer requests.

Breeding

Total efficiency of beef production is very important to producers faced with the present high costs of production. Breeding programs are aimed at increasing total efficiency through genetic improvement and use of current technical information.

Federal-Provincial Record of Performance (ROP)

This program is used by producers as a within-herd evaluation of animal performance. Manitoba Agriculture assists with record coordination, weighing assistance, and farm application of results.

Table 2

Number of Herds and Recorded Weaning Weights (WW) and Yearling Weights (YW) for 1981-1985

Year	Herds	WW	YW
1981	375	14,923	10,135
1982	451	18,997	11,206
1983	436	17,933	11,529
1984	394	17,433	10,711
1985	401	16,643	10,308

Progeny Proving Program (PPP)

PPP is intended to improve the genetic performance in Manitoba beef herds by selecting the top gaining bulls out of Manitoba's bull test stations and offering semen from the bulls to cooperating herds.

The superior bulls are identified for future use in artificial breeding. As a result, artificial insemination in beef herds has increased. Semen from PPP bulls is also being used at the Douglas Heifer Project and the Gunton Beef Heifer Project. Progeny proofs on PPP test sires are obtained through the National Sire Monitoring Program. The results to date have been very favourable with several bulls placing in the top 10 per cent of their respective breed for gain to weaning.

Sons of the test bulls returning to the Manitoba Bull Test Station are exhibiting superior gains. In 1985 they indexed 6 per cent higher for average daily gain and 3 per cent higher for weight per day of age. Daughters of test sires are also weaning heavier than average calves.

In 1985, 59 herds and 1,603 cows were enrolled in PPP. Four new bulls were selected for the program.

Bull Test Stations

The popularity of performance testing bulls continues at seven recognized bull test stations within the province. A total of 1,017 yearling bulls were tested at the following stations: 36 from the Blonde d'Aquitaine, 161 from the Interlake, 45 from the Limousin, 535 from the Manitoba, 66 from the McKnight, 105 from the Northwest and 69 from Red Power Bull Test Station.

Those bulls superior in performance (growth) which also met reproductive standards were offered for sale. A total of 414 superior bulls were sold from all stations. Most of these bulls were purchased by Manitoba breeders and will ultimately improve growth potential in their herds. Manitoba Agriculture encouraged consignors to provide home test data through a $50 per bull incentive grant. This information is made available to potential buyers to enable them to assess the genetic worth of the young sires with greater accuracy. A total of 661 bulls were eligible for the grant, with $33,050 awarded to the eligible test stations.

Table 3

Summary Of The Progeny Proving Program (PPP)

1981-1985

Year	No. of Bulls Collected	No. of Bulls Obtaining Proofs	No. of Herds Enrolled	No. of Cows Enrolled
1981	3	3	37	952
1982	4	3	30	760
1983*	4	1	31	843
1984*	1	—	32	816
1985*	4	—	59	1,603

**Insufficient time to generate progeny proofs.*

Awards Program

The Beef ROP Awards Program was initiated to recognize outstanding achievement of individual beef producers. The 1985 awards were presented to David and Bev Lischka of Deloraine, commercial cattle producers, and Evin and Verne Dunn of Russell, purebred cattle producers. These producers demonstrated the effective use of production and performance records in achieving their breeding goals.

Branding

Manitoba cattle producers have become increasingly concerned about cattle theft and other losses. Branding reduces the incidence of theft and increases the chances of missing animals being returned. The return of one animal more than covers the cost of many years of branding and registration fees.

During the year, 221 new brands were registered, to bring the total registered cattle and horse brands in Manitoba to 3,947.

Marketing — Beef Breeding Stock

The Marketing Branch continued to work closely with local exporters and breed associations to develop and expand markets for Manitoba breeding stock. Inquiries from Panama, Guatemala, Mexico and other countries were forwarded to appropriate sources. As well, staff provided advice on shipping, documentation, health requirements, in connection with developing quotations for foreign markets. A meeting was arranged with the Mexican Minister of Agriculture during his visit to Manitoba, to discuss beef breeding stock and other agricultural commodities.

A 20 foot display featuring color photography of Angus cattle was provided in support of the Manitoba Angus Association at the World Angus Forum in Edmonton.

The Department was represented on the board of directors of Canadian Western Agribition and at a seminar in Calgary on trade opportunities between Hungary and Canada. A marketing representative attended Ag China '85 held in Beijing, China, where Manitoba's beef breeding stock was discussed and promoted to interested parties at this major show. During the year, the Branch coordinated and set up farm inspections for an incoming mission from Korea.

Extension

All regions reported an emphasis during the year on the promotion of one-owner finishing of beef. Low prices were alleviated for many by the Manitoba Beef Commission program, as a majority of cows in each region were covered by that program. The finishing of beef as a means of increasing farm income was actively supported by the Manitoba Beef Commission program and complemented by extension activities. Producer acceptance of these efforts was good and the finishing of beef on farms continued to develop.

Regional staff continued to provide complete management information required for producers to finish their own cattle and market them at the proper time. In this connection, many producers were encouraged to follow their slaughter cattle through to the rail, for confirmation of their earlier estimate of degree of finish.

General extension activities in the beef area covered all aspects of nutrition, herd health, cow herd management and calf management. These topics were highlighted in activities that ranged from demonstrations and clinics to meetings, field days and hundreds of individual consultations. The availability of computers in the regions increased the effectiveness of many producer consultations. Response to these programs has been excellent, an indication of producer desire to reduce losses and improve efficiency of their cattle operations.

The revised ROP program proved to be more acceptable to producers and resulted in renewed interest in the program. Most regions carried out sire evaluation projects. Enough sires failed to gain approval to indicate the need for a continuation of this kind of testing.

Pregnancy checking was another procedure that proved to be most beneficial to the beef producer. Again, a program in the Ashern district involving 2500 cows proved to be the largest project of its kind in the province.

Agro-Man/Agri-Food

During the year, most regions were completing the last of the Agro-Man projects and commencing new Agri-Food projects.

Agri-Food projects organized and started this year included the Ethelbert feedlot demonstration, the Douglas and Deleau feedlot projects and the Benchland beef and forage demonstration site at Gladstone. In addition, a new semen evaluation project was started in the Eastern Region.

Meetings, field days and tours were organized for producers at these sites and while the projects are in their early stages, they are already proving beneficial to area producers taking part in the programs.

Hogs

The hog industry plays an important role in Manitoba's agricultural economy, with this year's hog farm cash receipts at $194.5 million or 9.7 per cent of total farm cash income. The hog cash receipts were up five per cent from last year. Hog marketings were up 11.1 per cent to a record 1.58 million head, continuing a consistent growth pattern since 1976. Hog prices were lower as a direct result of the U.S. imposed hog import duty. The 100 index price averaged $66.31 per cwt., down $3.78 from 1984. A total of 3,265 production units shipped hogs to the Manitoba Hog Producers' Marketing Board. Manitoba's hog quality continued to move ahead, with the percentage of carcasses indexing 102 or higher reaching 78.1 per cent in 1985. This performance was 3.6 per cent better than the previous year and nearly 2.0 per cent over the national average.

Provincial extension programs are aimed at strengthening the managerial capacity and economic returns of Manitoba swine producers. Emphasis is placed on improving genetic performance, sow productivity, feed efficiency and carcass quality, and also providing farmers with current technical information.

Nutrition

The Provincial Feed Testing Laboratory analyzed 636 feed samples for swine producers. Comprehensive ration and feeding recommendations numbering 269 were forwarded and follow-up farm calls were made upon request. A survey of 46 swine producers making their own feeds with electronic proportioner hammer mills was conducted, and the results were presented at several producer meetings. Departmental staff also provided recommendations on proper ration formulations and mill calibration procedures to survey participants.

Breeding

Manitoba Agriculture offers two swine performance testing programs: the Federal-Provincial Record of Performance (ROP) and the Commercial Hog Improvement Program (CHIP) to improve breeding stock quality, total herd efficiency and market grades.

Federal-Provincial Record of Performance (ROP)

The Federal-Provincial ROP Program encourages the production and use of quality breeding stock by identifying genetically superior animals and advising breeders on herd culling, replacement selection and total herd efficiency evaluation.

Manitoba purebred swine producers evaluated 4,308 animals under the home test and 91 young boars at the Brandon test station in 1985 (Table 4). Five herds representing 423 sows participated in the National Sow Productivity and Management Program and averaged 2.3 litters weaned and 19.8 pigs weaned per sow per year. Twelve herds were classified under the provincial herd health program.

ROP technician workshops and Provincial Advisory Committee meetings were held throughout the year.

Table 4

Swine ROP (Record Of Performance) Summary

1981-1985

Year	No. of Animals	Adjusted Age to 90 kg (Days)	Adjusted Backfat to 90 kg (mm)	Average Daily Gain (kg)	Feed Conversion (kg feed/ kg gain)
MALES STATION TEST (ROP Boar Test Station, Brandon)					
1981	309	151.6	13.8	0.87	2.53
1982	166	151.4	13.9	0.86	2.43
1983	195	153.2	13.1	0.85	2.57
1984	186	148.5	13.9	0.91	2.39
1985	91	151.3	13.5	0.88	2.33
MALES HOME TEST					
1981	1496	169.2	13.5		
1982	1697	170.0	12.9		
1983	1906	167.0	12.8		
1984	1315	167.5	12.3		
1985	1346	162.8	11.9		

Table 4

Swine ROP (Record Of Performance) Summary

1981-1985 (Continued)

Year	No. of Animals	Adjusted Age to 90 kg (Days)	Adjusted Backfat to 90 kg (mm)	Average Daily Gain (kg)	Feed Conversion (kg feed/ kg gain)
FEMALES HOME TEST					
1981	2812	181.5	15.2		
1982	2540	175.7	14.9		
1983	3335	178.6	14.7		
1984	3124	175.6	14.4		
1985	2962	171.6	13.8		

Commercial Hog Improvement Program (CHIP)

CHIP is a performance testing and management record keeping system available to commercial producers. The Department provides an ultrasonic backfat probe service and various record-keeping materials and forms. Producers are also provided with ear notchers, farrowing calculators, individual sow charts, sow herd record booklets and factsheets on record keeping. Besides assisting new producers in establishing a record keeping system and interpreting performance information, staff advises on other management practices and new developments in the swine industry. CHIP herds continued their dominant role in provincial market hog quality by marketing nearly nine per cent more hogs in the 102 index or higher category than the provincial average. This is similar to their advantage achieved in the previous five years (Table 5).

Table 5

Quality of CHIP and Manitoba Hogs

1981-1985

	Per cent of Hogs Indexing 102 or Better		
Year	CHIP Average	Manitoba Average	Difference
1981	78.6	65.8	12.8
1982	78.0	67.3	10.7
1983	86.0	73.2	12.8
1984	85.0	74.5	10.5
1985	87.0	78.1	8.9

Extension Activities

The Department provided financial assistance and technical expertise to Manitoba Hog Days, sponsored a province-wide swine seminar and continued the factsheet distribution service. Other activities included commodity group workshops, on-farm consultations, farrowing schools and provision of technical information through factsheets, bulletins, news releases, training aids and other related publications. A computerized swine record-keeping and analysis system was obtained and demonstrated to producers, staff and agri-business personnel. The quarterly Manitoba Swine Update Newsletter was sent to all registered Manitoba swine producers.

Liaison was maintained and discussions were held with agri-business, producer groups and research institutions.

Financial and technical support was again provided to the Weanling Improvement Sales and Services Co-operative Ltd. (WISSCO). WISSCO was established to provide a continuous supply of high quality, healthy weanlings through a formal herd health program and to provide an equitable price setting mechanism for weanlings through a bi-weekly tele-auction. WISSCO sold 12,553 weanlings through 26 tele-auctions in 1985. The floor price received by suppliers ranged from $0.86 to $1.09 per pound for a 40-pound weanling.

All regions reported an active swine extension program. Most of this regional activity involved ROP-CHIP home test services, housing and ventilation design, general production and financial advice, nutrition and feeding information, reproductive management, farrowing schools, support to Hog Days and the Swine Seminar, record keeping and analysis and enquiries regarding the tripartite stabilization program. In many cases, swine production was seen to be concentrating in fewer but larger production units.

Manitoba Hog Days/Manitoba Swine Seminar

Manitoba Hog Days is the largest swine extension event held in the province and alternates between Winnipeg and Brandon. Activities include producer seminars and a large exhibition hall of commercial displays. About 1,000 people attended the 1985 meeting in Brandon.

The Manitoba Swine Seminar is a two-day educational event and features local and international speakers addressing various technical aspects of swine production. Over 200 individuals attended the 1986 seminar in Winnipeg.

Swine Factsheet Service

Subscribers to the service receive factsheets and other publications containing the latest information on swine production and management techniques. Fifty-nine publications have been distributed through the service since its inception in 1981. Publications issued during the year included seven new or revised factsheets on ROP, nutrition, herd management and financial planning. Over 1,000 individuals subscribe to the service, reflecting the strong producer interest in this type of extension medium. Complimentary subscriptions are given to swine 4-H club members and leaders.

Agri-Food

A three year Agri-Food Swine A.I. Project offering technician service was initiated at year end. The project is designed to make Manitoba swine producers aware of the many benefits of artificial insemination and is being administered by the Weanling Improvement Sales and Services Co-operative Ltd.

Marketing — Swine Breeding Stock

A working relationship was maintained with producer groups, including the Manitoba Swine Breeders' Association and the North West Swine Breeders' Association, as well as individual producers. Marketing staff assisted in coordinating responses from producer associations and local exporters to more than a dozen enquiries from foreign countries. On an ongoing basis, federal market investigation reports were analyzed for marketing opportunities for Manitoba.

During the year, foreign missions hosted by the Marketing Branch included two from Japan and others from China, Mexico and Korea. Manitoba itineraries — designed to exhibit the quality of swine breeding stock in the province and to have mission members meet producer groups, exporters and government representatives — were arranged. As a result of these missions to Manitoba, sales to Japan resulted and others are anticipated. In one case, a considerable quantity of livestock handling equipment was sold to Japan.

Manitoba stock was promoted at the Ag China '85 show in China, at a Hungarian sponsored seminar in Calgary and through representation on the board of directors of the Canadian Western Agribition.

Marketing staff provided assistance to the Manitoba Swine Breeders' Association as they looked at the feasibility of taking over management of the ROP Swine Test Station in Brandon. They provided additional support to the association by locating a display at the annual Hog Days program. The Weanling Improvement Sales and Service Co-op was also provided with general supportive assistance.

Marketing — Pork

In 1985, Manitoba slaughtered approximately 1.5 million hogs, an increase of 20.5 per cent over the previous year. Nearly 70 per cent of these hogs were exported.

The Marketing Branch hosted and set up itineraries for three missions from Japan. Members of these missions represented large retail store chains interested in pork from Manitoba. As a result of these missions and similar ones in previous years, many new customers for Manitoba pork have been established in Japan.

Promotional assistance has been provided in both domestic and international markets, and arrangements were made for samples to be sent to potential buyers in the U.S.A. and Japan.

In conjunction with the Manitoba Hog Producers' Marketing Board, promotional activities were undertaken in exhibitions and shopping centres in Winnipeg and a number of rural areas. Work was also undertaken with the food service industry in the preparation and completion of recipe brochures.

Sheep

The sheep industry continues to play an important part in Manitoba's agricultural economy as an alternate income source on many farm operations. Sheep numbers decreased slightly to total 20,000 head by January 1, 1986, 89 per cent of the total of the pre-

vious year. However, the continent-wide shortage of lamb starting in late 1984 improved prices to the point where, despite slightly lower market volumes, cash receipts for lamb and wool in Manitoba increased dramatically — by 60 per cent to just over $2.5 million.

The Manitoba Sheep Association and its regional affiliated associations continued to be active in representing producer interests, particularly in areas of extension and market development.

Nutrition

Increasingly, producers are taking advantage of the service of the Provincial Feed Testing Laboratory. Following many of the analyses, feeding recommendations were made. Subsequent farm visits were also made upon producer request.

Breeding

In 1985, the number of lambs enrolled in the Federal/Provincial Sheep Record of Performance program was 826, representing a significant drop from 1984 levels. However, producer interest in the new program, scheduled to be in place within the next year, is running high and enrolments are expected to increase with the installation of the new program.

Extension

The Annual Sheep Seminar in March, 1985 provided sheep producers of all levels of expertise with an excellent opportunity to update their knowledge in several areas of sheep production. The emphasis this year was on disease management and facility design.

The Predator Taste-Aversion Program was again expanded, largely through the assistance of the regional sheep associations which coordinated activities locally. Bait-making workshops were again held in two locations in the province.

Other extension meetings and field days emphasized general flock management, breeding systems, flock health, nutrition, taste aversion, shearing, and lambing-time preparation. Farm calls were a priority of the provincial sheep specialist, and the bimonthly publication of "Sheep Sense," the industry newsletter, provided producers with current industry news and production information.

Marketing

Slaughter numbers at federally and provincially inspected plants in Manitoba dropped only slightly (from 10,835 head in 1984 to 10,646 head in 1985). This volume was still more than double the volume of five years ago. Lamb marketing continued to be a major concern of Manitoba producers, even though prices through the year were strong. During 1985/86, the Manlamb Producers' Co-op Ltd. assembled and marketed approximately 650 lambs, with most of these coming from the Westman area.

Departmental staff continued to assist the promotion of sheep products, a major activity of the Manitoba Sheep Association and regional associations at fairs and in shopping malls.

In response to inquiries from Mexico for sheep breeding stock, the Marketing Branch held discussions with the Manitoba Sheep Breeders' Association.

Poultry

Poultry activities and regulations have as their objectives:

- improving production and economic returns to individuals or groups within the poultry industry, by providing technical advice on management practices and assistance in the development of improved marketing systems;
- maintaining quality standards for eggs and poultry as prescribed under *The Livestock and Livestock Products Act;*
- controlling pullorum, typhoid and other diseases in poultry flocks through the hatcheries and hatchery supply flock regulations;
- improving the availability and acceptance of production technology for hatcheries and hatchery supply flocks.

Nutrition

Recommendations on 306 feed samples were prepared and sent out. In addition, nutritional information involving ration recommendations was supplied in response to requests from producers and feed manufacturers.

Breeding

Broiler breeder operators were assisted by the distribution of a Record of Performance book. Assistance was provided on the use of the book. Records from 26 flocks were processed, summarized and presented to participating producers. News bulletins were issued covering areas of concern to breeders such as management, disease and feeding.

Manitoba Agriculture conducts a hatchery monitoring project which involves a thorough examination of hatcheries and eggs in hatcheries. The effectiveness of sanitary procedures of both the hatchery and hatchery supply flock is assessed so that diseases may be detected and treated. Four hundred and fifty-three microbial plates were taken on site and results were interpreted.

Provision was made so that hatcheries could, if they desired, carry out a self-monitoring program using the microbial plates. Five hatcheries made use of this offer and used 389 plates at the hatchery level. Hatchery monitoring for breeder flock evaluation, whereby hatches or portions of hatches are examined in detail, was carried out.

Demand increased for advisory work with hatcheries again this year. Advice on management, operation and sanitation was provided in detail to four hatcheries.

The Department continued to offer owners of turkey breeding flocks the opportunity to have their turkey toms graded through the collection and examination of semen. This process allows the selection of toms with the greatest fertilizing capacity and the culling of those of poor breeding quality. Management suggestions accompany participation in this activity. Four flocks were graded totalling 1,000 toms.

Poultry Health (Regulatory)

Application of the regulations under *The Livestock and Livestock Products Act* involved pullorum-typhoid testing of all hatchery supply flocks and the inspection of premises. Regulations require that all hatcheries with a 1,000 egg setting capacity or greater be licensed by the Department. In addition to the pullorum test, turkeys are tested by blood samples for P.P.L.O. and Salmonella typhimurium. Samples of blood are taken from all chicken breeder flocks and tested for Mycoplasma gallisepticum, Mycoplasma synoviae and Infectious Bursal Disease. All turkey breeder flocks are tested periodically to maintain a Mycoplasma meleagridis-free status.

Table 6

Hatchery Supply Flock Statistics Manitoba

April 1, 1985 - March 31, 1986

Flock Type	Number of Flocks	Female Birds
Broilers	34	109,571
Layers	16	63,969
Dual Purpose	18	11,217
Turkey	12	32,400
	80	217,157

Disease and Insect Control

Mycoplasma gallisepticum and Mycoplasma synoviae continued to be of concern and a testing program to evaluate their status in broiler breeder flocks was conducted. Infectious Bursal Disease and its effects was another important problem which breeder flock owners faced. Blood monitoring was conducted to provide information on vaccination efficiency. Mycoplasma meleagridis-free status of turkey breeders appears to have been achieved. Testing programs in support of this status were carried out.

Collection of data concerning Salmonella in turkey breeder flocks continued and involved collecting litter samples for analysis. Infectious Brochitis reappeared as a problem in poultry production. However, the newest vaccines appear to provide good protection.

Licensing

The Department continued to administer regulations respecting poultry and poultry products under *The Livestock and Livestock Products Act*. These regulations require the licensing of poultry dealers. In this regard, 27 licenses and 11 branch licenses were processed. In addition, 19 hatcheries were also licensed.

Marketing — Poultry

Poultry sales continued to Japan with the support of department marketing staff, the two poultry marketing boards and major processors. Three Japanese missions visited the province and met with producers, processors, marketing boards and Departmental staff. During the year, samples of poultry products were sent to Japan to companies that had not previously purchased from Manitoba. Samples of geese were also sent to the U.S.A. and Europe.

With increasing demand for deboned turkey and turkey parts, both in domestic and international markets, industry has responded by increasing deboning facilities in Manitoba.

Again this year, in cooperation with the poultry marketing boards, promotional activities were undertaken in Winnipeg, Steinbach and Brandon shopping malls and exhibitions, with recipe brochures distributed at these events.

Engineering Services — Livestock

Assistance was provided to producers in many facets of engineering related to livestock production. Departmental engineers advised producers in matters related to planning, development and remodelling of livestock operations, farmstead and building layouts, structural design and construction, equipment design and selection, ventilation system design and installation, facility operation and management, problem solving and trouble shooting. Engineering services were provided directly to producers through 1,935 individual consultations. On site assistance was provided with more than 500 farm calls related to livestock facilities. Engineering information was extended to more than 1300 livestock producers through 32 presentations at public meetings and producer seminars. Through the building plan service operated by the department, 1,380 standard building plans were provided in response to producer requests. More than 300 additional plans or plan sets were developed or modified to meet the specific needs of individual producers throughout the province.

Engineering staff placed special emphasis on promoting up-to-date ventilation technology to a wide cross-section of the livestock industry. Ventilation system components developed and evaluated by the department over the past three years can now be commonly found in all types of livestock facilities in all areas of the province.

Other noteworthy activities completed include a major province wide evaluation of on-farm feed preparation systems and continued heat exchanger development and evaluation work. Demonstration projects initiated in the past year included several farm pasture fencing demonstrations, calf range shelters, hay drying in storage, high moisture grain storage, wood fired heating systems, ventilation system improvements and farm fabricated heat exchangers. Detailed engineering assistance was also provided to many builders, contractors and equipment manufacturers and suppliers throughout the province.

Feed Testing Laboratory

The Feed Analysis Laboratory serves the Manitoba livestock industry by assisting livestock operators through the provision of information on the nutrient content of livestock feeds.

The laboratory analyzes feed samples submitted by livestock producers, feed companies, department staff and others. Chemical analyses are forwarded to nutritionists for interpretation and comment. For the year, the laboratory analyzed 761 samples of grain, 4,067 forage samples, 894 complete feeds and 764 unclassified samples, for a total of 6,486 samples. Staff performed 24,890 analyses on these samples.

Animal Nutritional Services

These services ensure that producers and owners of all species of animals have the most up-to-date technical information on nutrition and nutritional practices. Detailed and clear feeding recommendations are provided in response to results of feed analysis. Modern, efficient nutritional practices to support farmers in maximizing their returns are recommended. Preventative management and humane treatment of animals is encouraged.

For the year, 1,726 written reports were sent as a result of 5,690 feed samples submitted. More producers are recognizing the value of this nutritional service in developing feeding programs. Following is a breakdown of reports by commodity: beef 47 per cent, dairy 25 per cent, swine 26 per cent and horses, goats and sheep two per cent. Approximately 700 reports were prepared in response to samples submitted by other segments of the industry including local veterinarians, the Manitoba Crop Insurance Corporation and feed companies.

In addition to written recommendations based on feed analysis, nutritional counselling was provided in several hundred cases, both verbally and via mail, to producers and agri-business.

Nutritional information was also provided via on-farm consultations, commodity group workshops, factsheets, the media and local and regional meetings.

Nutritional expertise was provided to the Beef and Swine Sections via the joint 'Manitoba Bull Test Station Feed Evaluation Project' and 'Swine Feed Mill Calibration Project.'

The Western Nutrition Conference was held in Winnipeg in September 1985. A major role in planning and implementation was taken by the Nutrition Section. Both the general chairman and committee members came from the section.

The conference provides a forum in Western Canada for those people involved in the livestock industry to exchange new ideas and information. The Winnipeg conference attracted 175 nutrition and management personnel from seven Canadian provinces and seven U.S. states. They represented the feed industry, packing industry, grain trade, pharmaceutical and drug industries, provincial and federal extension specialists and university and federal government researchers.

Veterinary Services

The Veterinary Services Branch develops and administers the programs and activities which are necessary to assure rural and urban Manitobans ready access to competent veterinary services. Adequate veterinary care for the livestock industry is considered an important factor in the overall Canadian economy. All branch activities are designed to assure the Manitoba livestock industry of adequate veterinary care.

Western College of Veterinary Medicine

The Western College of Veterinary Medicine was founded in 1965 as a venture of the four western provinces to satisfy the long-standing western needs for veterinary training. Canada and Saskatchewan provided the capital funding while Manitoba, Saskatchewan, Alberta and British Columbia agreed to share net "after federal" operating costs on an annual resident student basis. These now exceed $11,000 per student per year. Student quotas were assigned according to the respective provincial livestock populations. Of the initial 60 students per year enrollment, Manitoba's quota was 10. Of the present 72 student enrollment, Manitoba's quota is 12. There is no immediate intention to further expand the college or the enrollment so Manitoba must continue active recruiting measures if we are to satisfy ongoing needs for veterinary services.

Veterinary Science Scholarship Fund Act

This activity was introduced in 1946 to counteract a declining interest in veterinary medicine, to assist Manitoba students in their four year away from home study and to encourage their return to rural Manitoba practice. For each year of Manitoba service, one-fifth of their total scholarship is written off. Scholarships of up to $750 per year per student are available.

Veterinary Student Summer Employment

Manitoba veterinary students must go out of province for the latter four years of their six-year university course. This four-year separation tends to break their home ties with Manitoba unless they are brought back for their summer recess each year.

The veterinary student summer employment activity attempts to maintain students' home preferences and favourably impress them with the satisfaction to be gained from rural Manitoba service by interspersing each of their academic years with four months of practical training appropriate for their academic level.

This activity is highly dependent on the cooperation of and financial participation by the rural veterinarians. They agree to spend the time and effort to train the students and to pay a portion of their salaries appropriate to their level of training.

Summer employment has proven to be our most effective method of preparing students for rural practice. It identifies those less suited to veterinary practice and recruits those well suited to rural Manitoba service.

Veterinary Services Act

This activity began in 1949 to assist rural municipalities in attracting and retaining resident veterinary services. The high cost of the travel involved was seen as the major obstacle to farmers fully using the service. Assistance was provided by mileage grants which enabled veterinarians to forego travel charges to ratepayers within the established district.

Over the next 20 years, further measures were required to maintain adequate veterinary services.

In 1970, amendments to the Veterinary Services Act provided additional grants for the establishment of public animal hospitals.

The concept of public animal hospitals provided by the province and jointly maintained and operated by the municipalities and the province was proposed as the best means of providing veterinary service. Thirty districts were established and 30 hospitals were constructed between 1971 and 1977. Veterinarians were recruited for districts before the hospitals were even completed. Many of the more remote areas which

had never had resident veterinary services and many which had lost their veterinarians benefited.

The program has now developed a consistent corps of some 70 full time veterinarians serving rural Manitoba. Of these, 53 practise from public hospitals and 17 from their homes or private facilities. In 1985, these 70 veterinarians made about 48,000 farm calls, handled about 50,000 in-hospital cases and extended over 100,000 free advisory services to Manitoba livestock producers. These services involved over 700,000 animals worth over $400 million. A minimum of $40 million worth of livestock is estimated to have been at risk and was saved by veterinarians in the year.

Veterinary Drug Distribution Centre

The Veterinary Drug Distribution Centre operates to provide veterinarians with volume buying power, to introduce greater price restraint in their sales, to restore a majority of the market to them and regain their willingness to provide free advice on drug use. The centre has progressively gained in all of these objectives and thereby achieved a reduction in unnecessary losses caused by drug misuse.

The centre continues to work to alleviate public apprehension about meat residues. The dramatic impact of public concern about drug residues in meat was brought home to Canadian producers in 1985. The American import market was closed to Canadian hogs on the excuse that they could have been treated with chloramphenicol before shipping and that the meat may have retained residues. Suddenly, the Canadian farmer suffered a far greater loss than the well-recognized curative value which chloramphenicol represented. Canada was forced to ban the sale or use of chloramphenicol in food animals.

In the withdrawal process, the centre provided the means to assess the quantities of chloramphenicol food animal products which were on the market and to quickly withdraw these at no cost to the veterinarians and minimal cost to the government. It effectively monitored restricted drug use and helped to protect the public. This helped restore public confidence in both the domestic and export red meat markets.

Humane Treatment of Animals

The Animal Diseases Act now states that livestock deprived of normal feed and care are classed as "diseased" and thereby subject to the veterinary directions authorized under that act. Over 90 per cent of rural veterinarians have volunteered to act on demand as humane inspectors.

A highly cooperative working arrangement has been developed with the R.C.M.P. As many as 50 cases are handled each year with about half proving unfounded. Many respond well to veterinary direction and only a few require court action.

Manitoba Semen Distribution Centre

Artificial insemination is one of the most effective means of improving livestock. However, economic limitations force Manitoba to rely on imported semen.

The Manitoba Semen Distribution Centre attempts to gain the best of both worlds by providing high quality semen from genetically proven bulls without the cost of owning, proving and keeping them.

Semen is purchased from other provinces, U.S.A. and overseas in sufficient volume to meet Manitoba's demand and to assure Manitoba livestock producers of their choice at a reasonable price. Sufficient discount is attained on the volumes purchased to recover fully the operating costs of the centre.

Field Services

Field activities deal primarily with overseeing the expenditure of grants in the 30 veterinary services districts. Staff veterinarians conduct field investigations of difficult cases, coordinate humane inspections, act as veterinary consultants to the drug and semen centres and extend veterinary information to farmers. They work closely with practising veterinarians, with local district boards, with the laboratory staff and with agricultural representatives and livestock specialists.

Veterinary Laboratory Services

The Veterinary Laboratory is the only full scale diagnostic laboratory for veterinary medicine in the province. It is charged with providing diagnostic services which are beyond the economic and expertise capability of veterinary practitioners and hospitals serving both food and companion animals.

In food animals the laboratory teams with rural practitioners to provide optimum quality services aimed at minimizing and preventing death and disease losses in the livestock industry. In companion animals, it teams with urban practitioners to bridge the gap of too small a population to support a full scale private diagnostic laboratory.

The laboratory participates in public health through the detection and control of zoonotic diseases which may be transferred from animals to humans. It assists in the health management of wildlife resources, laboratory animals and exotic animals in public and private collections. It supports animal research projects and serves as a front line of defence against the introduction of exotic diseases to the province.

The objective of the laboratory is to provide reliable, accurate and prompt diagnoses and diagnostic data which cover the whole spectrum of disease conditions in domestic and other animal species commonly found in Manitoba. The services are made available to livestock producers, pet owners and animal institutions by referring them to veterinarians. For service purposes, the laboratory is divided into three sections.

The Mammalian Pathology and Avian Medicine Section deals primarily in the pathological and histopathological examination of animal carcasses and tissues. Many diseases can be promptly and positively diagnosed from such examinations and, in food animals where large herds or flocks are at risk, treatment and preventative measures can be quickly implemented.

The Infectious Diseases Section deals with isolation and identification of a wide variety of animal pathogens of viral, bacterial, protozoan or metazoan nature. Positive identification of the pathogen permits the adoption of appropriate treatment and preventative measures. This section liaises with public health authorities in cases of zoonotic importance and with federal laboratories in cases beyond our internal capability.

The Clinical Pathology and Toxicology laboratory deals primarily in the determination of blood chemistry and cell abnormalities which indicate specific disease conditions. This data is most frequently requested in sick animals under treatment but where the diagnosis is still obscure. Such cases are almost always critical and require same day processing and reporting to be effective. The section also prepares the histology slides for microscopic examination and conducts toxicological and micronutrient studies.

In poultry there was a slight increase in the number of requests for service, up to 1,078 this year compared to 1,010 in 1984. In broilers, omphalitis, sudden death syndrome, ascites, skeletal deformities, necrotic enteritis, staphylococcal and coliform infections accounted for the majority of cases.

A commercial broiler farm experienced I.L.T. in three barns housing 30,000 birds. The farm was quarantined and the birds destroyed and buried on site. Compensation was provided, in part, by the Manitoba Government and marketing boards and industry. I.L.T. was also found in a nearby fancy flock which was the probable source.

In commercial layers, M.D. and Leukosis in roughly equal proportions remain a major cause of mortality. In some flocks, M.D. and L.L. appear simultaneously. Fatty Liver Syndrome still presents remedial difficulties. In turkey submissions, aneurysms, HE and coliform infections were consistent offenders.

Ionophore toxicity occurred in 1,800 11 week old poults. The flock was shipped. Mortality, DOAs and condemns exceeded 1,000 birds. The source of Ionophore was 200 kilograms treated cattle feed left in the mill, which entered the turkey feed lot.

Table 7

Manitoba Veterinary Medical Laboratory 1985 Summary of Operations

Total Cases — 12,345

Individual Test Procedures
1981 — 104,675
1982 — 124,330
1983 — 157,949
1984 — 198,511
1985 — 229,696

Summary of Test Procedures

Test Name	Food Animals	Non-Food Animals	Totals
Biochemistry	43,747	63,428	107,175
Hematology	6,385	17,433	23,818
Histology	8,781	5,393	14,174
Bacteriology	23,351	4,865	28,216
Mycology	746	349	1,113
X-Ray and Photos	209	223	432
Trim Tissue	18,559	8,525	27,084
Decalcifying	70	157	227
Parasitology	308	260	568
Serology	16,618	129	16,747
Virology	7,048	1,277	8,325
Animal Holdings	209	—	209
Toxicology	328	38	366
Copper Tests	1,078	22	1,100
Zinc Tests	141	1	142
Totals	127,596	102,100	229,696

Bees and Honey

Following the relatively harsh winter of 1984/85, most beekeepers reported generally good wintering success for colonies wintered both indoors and out. Spring conditions were generally fair to good for the build up of package and winter colonies.

Early summer conditions were good to excellent for both nectar production and foraging. Cool and wet conditions that prevailed through much of August caused the honey flow to stop at the end of July. This resulted in a reduced crop and also a reduction in the amount of coloured honey produced.

Package bee prices in 1985 did not change substantially from 1984 prices. For a two pound package of bees and a queen, prices ranged from approximately $25.00 to $29.25.

As a result of reduced crops in North America and several exporting countries, market conditions improved soon after the 1985 harvest. Beekeepers took advantage of the improved market conditions and increasing prices during the fall and, as a result, most honey available for bulk sales had been committed by year end.

Package Bee and Wintered Colony Survey (1985)

The annual package bee and wintering survey involved all commercial beekeepers, the Manitoba Co-operative Honey Producers Ltd. and Cloverfield Bee Supplies Ltd., to determine the number of colonies established from imported package bees and wintered colonies in Manitoba in 1985.

Acarine Disease Concern

Beekeepers were concerned about the occurrence and spread of the honey bee tracheal mite *Acarapis woodi* in the United States. To allow package bees and queens into Canada from the U.S., an agreement was reached with the U.S.D.A. to provide for the

Table 8

Honey Prices and Production, Manitoba

	1984	1985
Number of Beekeepers	1,750	1,350
Number of Colonies	116,000	120,000
Honey:		
Average kg/hive	73	64
Average lb./hive	(160)	(140)
Total Production — kg	8,436,000	7,680,000
Total Production — lb.	(18,560,000)	(16,800,000)
Price/kg — ¢	110	121
Price/lb. — ¢	(50)	(55)
Total Value	**$9,280,000**	**$9,240,000**
Beeswax:		
Production — kg	126,540	114,545
Production — lb.	(278,400)	(252,000)
Price/kg — ¢	374	374
Price/lb. — ¢	(170)	(170)
Total Value	**$473,280**	**$428,400**
Total Value Honey and Beeswax	**$9,753,280**	**$9,668,400**

certification of honey bees from certain states that had conducted surveys for the presence of this parasite. In order for states to gain approval for shipment of bees to Canada they had to be either mite free or have a quarantine and eradication program if mites were found.

In Manitoba, two summer students were hired to sample package bees for the presence of the tracheal mite. During the summer a total of 805 samples (100 bees each) were collected and analyzed with no evidence of mites. By year end the honey bee tracheal mite had not been found anywhere in Canada.

Research

In addition to the honey bee tracheal mite survey work, the provincial apiarist was involved in the development and implementation of an Agri-Food research project designed to study the effects of various pallet arrangements of hives on bee drift. The project was also structured to determine the honey production potential of various nectar-producing crops. This project was funded by the federal government through the Manitoba Beekeepers' Association. The extension apiarist assisted with another Agri-Food research project to study chalkbrood disease in leafcutter bees.

Extension Activities

Emphasis continued to be placed on four general extension activities; newsletters, meetings, personal visits and support of the four regional beekeeper associations.

Apicultural staff participated in various courses at the University of Manitoba and information was disseminated through telephone conversations and personal contact. During the summer of 1984, five honey bee wintering workshops were held at Winnipeg, Brandon, Dauphin, Portage la Prairie and Kleefeld.

Section staff actively supported the Red River Apiarists' Association in the organizing of the Manitoba National Honey Show. They were also involved in the honey promotional displays for the Manitoba Food Products Event and continued to act in an advisory capacity to the Manitoba Cooperative Honey Producers Ltd. and its members. Additional consultation was provided to the Manitoba Crop Insurance Corporation and the Manitoba Beekeepers Association on the establishment of a crop insurance program for beekeepers in 1986. Staff also worked with the Manitoba Beekeepers Association on honey promotion, annual meeting coordination, field days and in the prevention of pesticide damage to honey bee colonies.

Support to the beekeeping industry at the national level was maintained through committee work, and through meetings of the Canadian Association of Professional Apiculturists and the Canadian Honey Council. In the area of honey marketing, extensive recipe testing was carried out with the cooperation of the University of Manitoba.

Bear Damage to Apiaries

Under the Bear Fence Grant Program, administered by the Department of Natural Resources, beekeepers are eligible for a $100 grant for each electrified fence erected around an apiary. Each beekeeper is eligible to claim for a maximum of 10 fences per year. During 1985/86, a total of 40 grants were paid.

The Department of Natural Resources also offers a bear damage compensation program to compensate beekeepers for hive equipment losses caused by bears. In 1985/86, beekeepers were paid a total of $14,175 under this program.

Alfalfa Leafcutter Bees

Alfalfa leafcutter beas are kept to pollinate alfalfa for seed production. These bees double their numbers annually. This allows the beekeeper the option of increasing the acreage of alfalfa to be pollinated by leafcutter bees the following year or selling the surplus bee larvae (sold in the cocoon stage) to foreign or domestic markets.

Cool temperatures and excessive rainfall during July and August provided less than ideal foraging conditions for leafcutter bees. A 1985 producer survey indicated a 1.2 fold increase in the number of leafcutter bees produced. During 1985, an estimated 130 leafcutter beekeepers operated a total of 175 million bees on 6,070 hectares (15,000 acres) of alfalfa. Approximately 775 tonnes (1.7 million lb.) of alfalfa seed was produced. The total farm value of the alfalfa seed industry (seed and bees) was approximately $3.2 million.

The extension apiarist supported the leafcutter bee and alfalfa seed industries through general extension and acting in an advisory role to the Manitoba Alfalfa Seed Producers' Association (MASPA). This included assistance to that organization in hosting the Fifth Canadian Alfalfa Seed School in Winnipeg. He also served as the Manitoba representative on the technical advisory committee for the Canadian Leafcutter Bee Cocoon Testing Centre at Brooks, Alberta.

In 1985, MASPA had a three-year $117,000 project approved through the Canada-Manitoba Subsidiary Agreement on Agri-Food Development to demonstrate practical methods for the prevention and control of chalkbrood disease in leafcutter bee operations. A chalkbrood survey, undertaken by MASPA in the spring, failed to detect any new occurrences of this disease in domestic leafcutter bee stock in Manitoba.

An intensive chalkbrood monitoring program was also conducted during the summer in the three regions of the Interlake where the disease had previously been discovered. One hundred and twenty-one trap nests were placed in the Gimli, Arborg and Fisher Branch regions to collect samples of leafcutter bee cocoons. Chalkbrood was discovered in three trap nests at Gimli (ranging from 0.22 to 0.67 per cent infection) and in one trap nest at Arborg (0.15 per cent infection).

Crop Management and Marketing

Spring operations began in the last week of April in the Southwest Region and in southern areas of the Central Region. By the end of the first week in May, planting also started in all other regions. Planting of most crops was completed by the end of May. Generally, fall rye and winter wheat fields overwintered in fairly good condition, except where winter wheat was planted in summerfallow or cultivated stubble instead of standing stubble.

Crop emergence was slowed by cool weather conditions in all areas of the province. Heavy rainfall in May necessitated the reseeding of about 4,000 hectares (10,000 acres) in the Arnaud area. In early June, strong winds caused severe soil erosion and resulted in crop damage to canola, flax, and sunflowers, in many areas of the province. Favorable rainfall in early July improved the soil moisture in the Southwest Region, raising the soil moisture levels to "good" in all regions of the province. By late July it became apparent that most of Manitoba could expect above-average crop yields.

In August, repeated heavy precipitation fell in most areas of the province. Harvest operations were seriously hampered by further rainfall in September and snow in early October. Although record yields were obtained in wheat, barley, oats, flax, canola, and field peas, the quality was seriously below average. An estimated two to three per cent of the provincial crop remained unharvested at the onset of winter.

Cereals

Wheat

Plantings of bread wheat in Manitoba were estimated at 1.821 million hectares (4.5 million acres). This represented an increase of 121,000 hectares (300,000 acres) from 1984. Production of 4.899 million tonnes (180 million bushels) represented an increase of 38 per cent over 1984. This was mainly due to a record average yield of 2,690 kilograms per hectare (40 bu./ac.).

Katepwa became the most popular variety grown on 26.1 per cent of the wheat area. Neepawa and Columbus both dropped in popularity to 19.8 per cent and 21.4 per cent respectively.

Durum wheat was planted on 121,000 hectares (300,000 acres), an increase of 20 per cent from 1984. Due to increased plantings and a substantially higher average yield, production was 71 per cent above 1984.

Wakooma became the most popular variety, being seeded on 40.5 per cent of the durum area.

Fall plantings of winter wheat ranged between 16,000 and 20,000 hectares (40,000 to 50,000 acres) due to the wet conditions which delayed harvest of the 1984 crop.

Barley

Barley plantings were estimated at 749,000 hectares (1,850,000 acres), an increase of three per cent from 1984. Production of 2.526 million tonnes (116 million bushels) was 30 per cent above 1984, mainly due to a record yield of 3.37 kilograms per hectare (62.7 bu./acre).

The variety Bedford, planted on 34.7 per cent of the seeded area, became the most popular variety. Bonanza dropped into second place at 30.8 per cent.

Oats

Oats was planted on 233,000 hectares (550,000 acres), a small reduction from 1984. Due to the record average yield of 2,490 kilograms per hectare (65.5 bu./acre), production rose to 24 per cent above 1984.

The variety Fidler remained most popular in 1985 at 49.2 per cent of the planted area.

Rye

Rye plantings declined slightly to 80,800 hectares (200,000 acres). Production of 171,500 tonnes (6,760,000 bu.) represented a 12 per cent decrease from 1984. Fall seeded rye accounted for 99 per cent of the total plantings.

Oilseeds

Flax

Flax plantings of 425,000 hectares (1,050,000 acres) in 1985, paralleled the plantings of 1984. Production reached 577,000 tonnes (22,700,000 bu.), the highest on record. This was the direct result of a record average yield of 1,360 kilograms per hectare (21.6 bu./acre).

The variety McGregor, grown on 45 per cent of the planted area, remained the most popular variety.

Canola (Rapeseed)

Plantings of canola dropped to 405,000 hectares (1,000,000 acres), a decrease of 17 per cent from 1984. However, due to the record average yield of 1,569

Table 9

Summary — Major Special Crops 1985

Crop	Area (ha)	Yield Per Hectare	Price	Value of Production	Value of Hectare 1985	Value of Hectare 1984
Canola	404,858	1 570 kg	$265.00/t	$168,441,170	$ 416.05	$ 392.00
Sunflowers	64,777	1 190 kg	23.5¢/kg	18,114,888	279.65	413.60
Grain Corn	40,486	1.882 t	$120.07/t	9,148,692	225.97	464.03
Buckwheat	16,194	* 876 kg	34.4¢/kg	4,879,964	301.34	163.53
Field peas	44,534	2 419 kg	22.0¢/kg	23,700,104	532.18	424.94
Mustard	16,194	972 kg	35.2¢/kg	5,540,680	342.14	321.48
Lentils	10,120	1 439 kg	47.3¢/kg	6,888,148	680.65	591.80
Canaryseed	8,097	1 344 kg	27.5¢/kg	2,992,651	369.60	237.44
Sugar beets	9,878	30.22 t	$ 45.00/t	13,433,092	1,359.90	1,043.23

Crop	Area (Acres)	Yield Per Acre	Price	Value of Production	Value of Acre 1985	Value of Acre 1984
Canola	1,000,000	28 bu	$6.01/bu	$168,441,170	$ 168.28	$ 158.60
Sunflowers	160,000	1063 lb	10.7¢/lb	18,114,888	113.74	168.00
Grain Corn	100,000	30 bu	$3.05/bu	9,148,692	91.50	188.19
Buckwheat	40,000	*16.3 bu	$7.50/bu	4,879,964	122.25	65.91
Field peas	110,000	36 bu	$5.99/bu	23,700,104	215.64	171.72
Mustard	40,000	868 lb	16.0¢/lb	5,540,680	138.88	130.38
Lentils	25,000	1285 lb	21.5¢/lb	6,888,148	276.28	240.00
Canaryseed	20,000	1200 lb	12.5¢/lb	2,992,651	150.00	96.00
Sugar beets	24,400	13.49 tons	$40.82/ton	13,433,092	550.66	421.74

**Trade estimates of yield closer to 876 kg/ha (11 bu/ac).*

kilograms per hectare (28 bu./acre), total production rose by 17 per cent to 635,000 tonnes (28,000,000 bushels). Varieties of the Argentine type were used on 90 per cent of the total area.

Sunflowers

Sunflower plantings were estimated at 64,700 hectares (160,000 acres), down 18 per cent from 1984. Manitoba produced over 90 per cent of the western Canada crop. Non-oilseed hybrids accounted for about 10 per cent of the total sunflower area.

Special Crops

Total production of special crops declined slightly in 1985. Decreases in plantings were recorded in grain corn, buckwheat, canaryseed and soybeans, while sugar beets and field beans showed modest increases. Plantings of field peas, lentils, fababeans and mustard held at 1984 levels.

Grain corn plantings fell dramatically in 1985. Plantings of 40,500 hectares (100,000 acres) were 45 per cent below 1984. Due to very cool weather throughout the growing season, yield and quality of the harvested crop were much below normal.

Field peas produced well under the cool growing conditions and a record average yield of 2,450 kilograms per hectare (36.4 bu./acre) was achieved. The quality of the harvested crop was generally good.

Yields and quality in other special crops varied quite widely. Generally, yields of mustard, lentils, canaryseed, soybeans and field beans were good, but the quality was lower than in 1984. Buckwheat and fababean yields were somewhat below average, and the fababean quality was poor. Yield and quality of safflower was poor, mainly due to disease problems.

Marketing — Special Crops

Numerous inquiries on special crops came from a variety of countries and covered a wide range of

Table 10

Major Crop Kinds Planted for Seed Production

	1985		1984	
	Hectares	Acres	Hectares	Acres
Wheat	45,935	113,460	50,155	123,884
Barley	17,206	42,500	19,625	48,474
Oats	1,761	4,350	2,923	7,219
Flax	16,257	40,156	19,849	49,026
Canola	2,668	6,590	4,027	9,946
Other	27,156	67,076	29,138	71,972
Total	110,983	274,120	125,717	310,521

commodities such as peas, beans, lentils, buckwheat, corn, canola, forage seeds, soybeans, mustard, etc. These inquiries were passed on to the industry for follow-up, as required.

Again this year, the Japan Buckwheat Millers' Association sent a delegation to Manitoba to view buckwheat immediately prior to harvest and to negotiate for supplies. The marketing branch set up the necessary itinerary, which included field tours, meetings with industry and the research station, as well as senior departmental officials.

Early development work was done on a new "Grains, Pulses & Seed" kit, which will contain a variety of 60 samples of these commodities and be of great assistance world-wide in the marketing of special crops from Manitoba.

Seed Production

A total of 110,980 hectares (274,120 acres) were devoted to seed production in 1985. This was a decrease of 14,737 hectares (36,400 acres) from 1984.

New Crop Investigations and Development

The search for new crops which have feasibility for production in Manitoba continued in 1985.

In field bean trials, the cool growing conditions provided a good opportunity to assess the tolerance of varieties and types to cool weather. Pink and pinto beans yielded well, and navy beans reasonably well. Black beans, red kidney, Mexican red, and Dutch brown performed poorly.

A granular inoculum demonstration with soybeans provided poor nodulation on the root system, possibly the result of 1985 weather conditions. However, the inoculated soybeans were three to five per cent higher in protein content than the non-inoculated ones. A soybean date of seeding trial indicated that soybeans should preferably be seeded between May 15 and May 20, rather than after May 20.

A seed increase of a new small seeded soybean variety, suitable for "natto" production in Japan, was carried out in 1985. This type of soybean usually brings a price premium over regular larger seeded soybeans in the Japanese market. Also, the feasibility of controlling Sclerotinia disease in lentils by means of fungicide application was investigated.

In safflower, variety trials as well as date of seeding trials were conducted. In addition, seed multiplication of lathyrus, lupinds, and Kaiware radish was carried out.

Agro-Man Project

One project operating under the cost shared agreement between Agriculture Canada and Manitoba Agriculture was conducted for the seventh consecutive year. The Crop Variety Demonstration Project determined the performance of 20 crops, including 84 varieties of cereal, oilseed and special crops, over 250 forage entries, 627 cultivars of 73 different annual flower types, 1,175 species of herbaceous perennials, 34 cultivars of 14 vegetables, and numerous test lines of potatoes. The trial locations were distributed through all five regions of the province.

Insect Control

Extension activities in entomology are carried out to make people more aware of safe, effective methods of pest management and the potential hazards which could result from the misuse of insecticides. Servicing

enquiries from field staff, dealers, applicators and farmers requesting insect identification and control information is the major activity during the growing season. Economic threshold guidelines and control recommendations were provided in various insect control bulletins. During the year, 23 issues of the Manitoba Insect Report were forwarded to approximately 1,200 persons advising on, or directly involved in, insect pest management. Field surveys were carried out on a regular basis during the growing season to provide early warning of potential infestation of crop pests.

Crop Insect Infestations

Grasshoppers — were again the most important insect pest problem in Manitoba in 1985. Major egg hatching began in early June and continued through the month. Extensive control measures were begun by farmers and municipalities in early June, and these control programs, combined with favorable growing conditions, resulted in much less crop damage compared to the previous two years. The most widespread infestations occurred in southwestern Manitoba with the heaviest concentrations of grasshoppers occurring in the Hartney-Lauder-Grande Clairiere area.

Aphids in Flax — An outbreak of the potato aphid occurred on flax during late summer. This pest has occurred in Manitoba (on average) once every 10 years. Cool, wet weather conditions during August prevented further development of the aphid and crop losses due to aphids were not considered significant.

European Corn Borer — Populations of this insect declined significantly during 1985 in the major corn growing area of south-central Manitoba. Populations increased in the Brandon area. Considerable acreage was sprayed for corn borer control. However, in many instances the populations were kept low by the cool, wet summer.

Sunflower Beetles — Although some spraying occurred for this insect (mostly in southwestern Manitoba), populations were generally low.

Cankerworms — Heavy populations of cankerworms occurred in several small towns and on many farmsteads. Spraying took place in Morden and Carman.

Field Surveys and Monitoring

Grasshoppers — Staff carried out a province-wide survey of adult grasshoppers in early August to gather data for a 1986 forecast. A less extensive egg survey, carried out in October better assessed potential problems for 1986.

The 1986 forecast indicates that the overall area of infestation could decrease by 10 per cent compared to 1985. However, the severity of infestations could be 30 per cent greater, depending on weather conditions during the 1986 growing season. The major potential areas of infestation are again in the southwestern part of the province with areas of less infestation in central Manitoba.

Table 11

1986 Grasshopper Forecast

	1986	1985
Light	6,625 km² (2,558 mi²)	10,260 km² (3,961 mi²)
Moderate	6,480 km² (2,505 mi²)	4,680 km² (1,807 mi²)
Severe	770 km² (297 mi²)	610 km² (236 mi²)

Wheat Midge — A province-wide survey of wheat midge was completed for the second year. Midge were present throughout the entire wheat growing area. However, the incidence of midge was below economic levels in all areas, with the exception of a few fields in the Swan River Valley.

Sunflower Midge — The area in which sunflower midge was found remained essentially the same as in 1984 with slight northward movement. It is still confined to the Red River Valley where the soil is heavy.

A total of 139 fields were surveyed and a noticeable move from light to moderate categories was observed. No damage was found in 29 per cent of the surveyed fields, light damage was observed in 49 per cent of the fields, 19 per cent had moderate damage and three per cent were classed as severe.

Losses which could be attributed solely to sunflower midge damage were still low.

Field Research — For the second year in a row, damage assessment surveys were carried out in the Swan River area to determine the economic impact of wheat midge on wheat production.

The highest level of damage observed in 1985 was about 13 per cent compared to 32 per cent in 1984. The total number of fields with significant levels of damage (above 15 per cent) was also lower. The two years' work indicates that, to date, wheat midge in Manitoba has had little impact on wheat yields.

Municipal Grasshopper Control Assistance Policy — The department provided assistance to municipalities in control of grasshoppers on roadsides, drainage ditches and other public lands. The assistance was in the form of a rebate for the purchase of chemical

applied by the municipality or by someone hired by the municipality. A total of $517,902 was paid in rebates to 56 municipalities.

Pesticides Control

A total of 849 retail pesticide dealers and 261 commercial pesticide applicators were licenced in 1985 under the Pesticides and Fertilizers Control Act. New dealers and applicators qualified for their licences by attending training courses and successfully completing written examinations. Applicators are being recalled to training courses every four years.

Dealer and Applicator Training — Four pesticide dealer/applicator courses were held in early 1986. They were attended by 150 dealers and applicators. Dealers and applicators completed supervised written examinations at the courses to qualify for licencing. Separate training courses and examinations were held for pharmacists and veterinarians. Training courses for applicators included the following subjects: aerial application, ground application, rights-of-way, landscape, golf course superintendents, forestry, and structural pest control. Attendance totalled 500.

A total of 16 dealers and 37 applicators completed examinations for provisional licences. Licences are renewed by completing courses the following year.

Dealers and applicators were provided with updated educational material on insect, weed, plant disease and vertebrate pest control.

Enforcement — Seventy unlicenced pesticide dealer outlets were checked. Most were found to be out of business. The remainder complied with licencing and no prosecutions were carried out.

Two unlicenced pesticide applicators were checked. One case is being prosecuted. The other case was dropped due to evidence obtained after the six month statute of limitations.

Nineteen alleged pesticide bee poisonings were reported. Only one was reported in time for investigation and was found invalid. Eight herbicide-related damage incidents were reported and investigated. All were resolved.

Cholinesterase Blood Tests — The blood testing service is a cooperative effort between the Department of Agriculture and the Cadham Provincial Laboratory. It is offered free of charge to licenced pesticide applicators and their staff. The test measures blood cholinesterase levels which can be lowered by the presence of organophosphate insecticide.

The test has been offered for several years. In 1985 there were only six participants and a total of 16 samples received. The samples were submitted erratically and numbers are down substantially from past years.

Horticulture

Table 12

Total estimated value for 1985 horticultural production

Potatoes	$38,025,000
Commercial Vegetables (Fresh)	6,466,000
Fruits	3,000,000
Environmentally Controlled Production (Greenhouse and Mushrooms)	13,400,000
Nursery Products and Sod	8,250,000
Miscellaneous	4,680,000
Total	73,821,000

Potatoes

The area planted to potatoes in 1985 increased to 18,000 hectares (44,500 acres), up 10.7 per cent from 1984. Of this total area, 14.2 per cent was allocated to table stock production, 77.7 per cent for processing stock and 8.1 per cent for seed potatoes. Gross production was estimated at 340,427 tonnes (7,505,000 cwt) with a gross yield of 18.9 tonnes per hectare (168.7 cwt per acre).

Excessive moisture, limited storage space and a severe during-the-harvest frost resulted in an estimated 2,430 hectares (6,000 acres) of the planted area left unharvested.

Spring planting conditions were good with uniform and timely emergence of most fields. Some growers experienced significant stand reductions in red varieties which limited the yield potential in those fields. Soil moisture levels deteriorated in late July and early August. This was followed by excessive rainfall, particularly in an area north of Carman through Elm Creek and on to Bagot. Potential yields at the time were high but many fields were only partially harvested and others were not sufficiently firm to harvest at all. This was followed by snow and frost in early October. Tubers harvested after this adverse weather had been severely chilled and sustained some frost injury. The degree of damage and effect on quality for processing varied from area to area and field to field.

Vegetables

The 1985 growing season was most unfavorable for vegetable production. The month of May was generally favorable but somewhat windy. Frost and excessive winds in early June resulted in some crop damage. Overall, June was cooler and wetter than normal. July temperatures were favorable to growth, but the 11.1 mm of precipitation was very much below normal. August was disastrous for many growers. Temperatures were extremely cool, with a record rainfall in excess of 250 mm. As a result of continued cool, wet weather, significant acreages of summer and root crops were not harvested.

Fortunately the quality of the crops harvested was considered to be good, with prices generally strong.

Environmentally Controlled Production

Manitoba mushroom production increased approximately 28 per cent from 37,195 kilograms per week (82,000 pounds per week) to 47,720 kilograms per week (105,000 pounds per week). Total annual production for Manitoba was 2.5 million kilograms (5.5 million pounds), with exports accounting for 363,636 kilograms (800,000 pounds). The addition of a production facility at Oakville, combined with increased production at most other production facilities, contributed to this increase. The phenomenon of higher per capita consumption throughout North America is also being experienced in the Manitoba markets. Factors such as the consumer awareness of the Fresh For Flavor promotion, nutritional consciousness and competitive dollar value compared to imported vegetable produce have apparently strengthened the consumer demand.

Manitoba's share of prairie mushroom production remained relatively static at 44 per cent. B.C. continued to be the major supplier to Manitoba markets. Production for processing was down approximately eight per cent over 1984. High demand for fresh produce plus lower percentage of "B" grade mushrooms contributed to this trend. Prices remained fairly static at $7.25 for 2.2 kilograms $7.25 for five pounds) during 1985.

Greenhouse Production

The greenhouse industry has expanded by eight per cent over the last year with a total area under production of 8.64 hectares (21.3 acres). Seasonal markets continue to be strong with some displacement of local production by B.C., Ontario and Minnesota greenhouse suppliers. Bedding plant growers or seasonal greenhouse growers experienced strong sales in 1985 with prices ranging from $0.11 to $0.18 per plant seedling. The industry value has been estimated at six million dollars. Market opportunity exists for growers to export to northern U.S.A.

Ornamental Crops

Nursery Stock: 1985 was generally a good year for wholesale and retail growers. Spring retail sales were very good, however, a cool, wet summer and wet fall resulted in poor fall sales. Wet fall conditions also hampered fall harvest in most areas. On the average, retail prices increased by about five per cent over 1984. Wholesale prices were up about three to four per cent over 1984.

Growers report an increase in planted acreage, with 75 to 80 per cent of the total acreage within 80 miles of Winnipeg. Manitoba growers imported approximately $1,000,000 worth of product for resale or growing. Total value of nursery crops sold increased approximately eight to 10 per cent over 1984.

Nursery Sod: As a result of winter rains, most growers suffered winterkill ranging from 25 to 40 per cent. Harvested acreage for 1985 was down 25 per cent from 1984, resulting in a heavy demand for sod throughout the growing season.

There was a general price increase of 20 per cent over 1984 for sod picked up in the field. Average field price was between 45 and 50 cents per M^2. Estimated production was 750 hectares (1,850 acres), valued at 3.7 million dollars.

Fruit

The area planted to strawberries increased by 12 per cent in 1985 with a total harvested area of 250 hectares (612 acres) and production valued at about three million dollars. Yields were average throughout the province at 5,616 kilograms per hectare (5,000 pounds per acre) in spite of considerable winter injury in some areas. The U-Pick industry has almost reached the saturation point. Prices remained stable in most areas at $1.76 to $2.20 per kilogram ($0.80 to $1.10 per pound). New and replacement plantings involved about 100 hectares (250 acres) in 1985.

New raspberry plantings increased 20 hectares (50 acres) in 1985. The total area in various stages of fruiting maturity is estimated at 40 hectares (100 acres). Consumer demand for the U-Pick product, combined with cottage scale processing opportunities, will continue to increase the area of production.

Research Consultation and Investigation

Consultations
Horticultural staff attended a total of 75 meetings with industry and research institutes in respect to research program planning. An additional 335 individual consultations were also carried out.

Investigations
Investigation and development projects were undertaken to determine new improved crop production and management technology that would increase efficiencies and overall economic returns to the industry. Many of these projects were initiated with the cooperation of the University of Manitoba, Agriculture Canada Research Stations and commercial growers. Funding in specific cases is under the Federal/Provincial Agri-Food Agreement.

Project Summary

Projects were designed to:

- conduct cultivar evaluation trials on potatoes, vegetables, small fruit and ornamentals
- assess maturity, yield and quality of the Shepody potatoes with the objective of a replacement for Russet Burbank
- determine effect of X-ray stimulated sprouting of cut seed, acidified fertilizers formulation and shelterbelts on yield, grade and product quality of Russet Burbank potatoes
- assess herbicides including Eptam, Poast and Fusilade for grass control in potatoes
- determine effect of split applications of nitrogen, addition of zinc, reduced row crop tillage, and vine killing on yield, grade and quality of Russet Burbank potatoes
- evaluate the F.A.S.T. system of fungicide spray scheduling for control of early blight on Russet Burbank potatoes
- conduct residue trials on Furadan and MH-60 SG to provide data for minor crop use registrations
- conduct herbicide evaluation trials for weed control in onions to provide replacement for Randox which has been withdrawn from the market
- conduct fertility and storage studies on cooking onions to reduce shrink and to improve marketability of end product
- investigate the potential of melons, muskmelons and garlic as new crops for Manitoba
- demonstrate mechanized installation and removal of plastic mini-tunnels
- evaluate carrot variety for resistance to sclerotinia disease
- determine the economic feasibility of sweet corn production for processing (frozen)
- determine optimum inrow spacing for broccoli production
- determine potential for control of sclerotinia on lentils with Rovral fungicide
- evaluate use of two seed treatments for control of botrytis neckrot of onions
- demonstrate outdoor and tunnel gardening in 14 communities in northern Manitoba (north of 53rd parallel)
- evaluate three soil fumigants for control of soilborne diseases of strawberries and potatoes
- evaluate the utilization of day-neutral strawberries to extend the marketing season
- evaluate the use of plastic mulch as an alternative to straw to prevent winter injury in strawberries
- demonstrate the value of ornamental type corn as a shelterbelt in strawberry production
- investigate light quality and intensity patterns required for the production of seedlings of various horticultural crops (joint project with Manitoba Hydro and commercial growers)
- initiate a study to evaluate existing soil and tissue analysis procedures and their ability to meet the needs of the greenhouse operations
- investigate the production of dried flowers as a potential floral crop in Manitoba
- investigate fertility requirements of Kentucky blue grass for sod production.

Program Delivery and Extension

The horticultural technology transfer program was undertaken through a variety of activities. Public information activities included the publication of 20 bulletins and fact sheets, participation in 29 radio and TV programs, the production of 44 press releases and the handling of 2,300 inquiries through the four month Hort-Line telephone answering service. In addition, individual specialists handled over 8,200 inquiries.

Three slide sets were prepared for extension use and a total of 107 meetings were held (attendance 5,048) for commercial growers and home gardeners, as well

as 12 field days and tours. A three-day educational conference and trade show was organized jointly with four grower associations, industry, and research institutes — with a total registration of 375.

Delivery Of Services

- **Plant Pathology** — Diagnostic services were provided for 3,500 samples, an increase of 56 per cent over 1984. Disease surveys were carried out on canola and for cyst nematodes in sugar beets. Analysis was carried out on commercial lentil seed for ascochyta disease infection. Staff participated in a joint study on determining presence of Vomitoxin in wheat.
- **Elite Seed Potato Production** — The department, in cooperation with the Manitoba Seed Potato Growers' Association, continued to support the production of Elite seed through the operation of Espo Farms. This ensured a source of disease-free seed stock to be used in producing commercial seed potatoes in Manitoba. In 1985, 9.3 tonnes of Elite I, 15.3 tonnes of Elite II and 18.9 tonnes of Elite III seed potatoes were produced for distribution to seed processors in Manitoba and Saskatchewan.
- **Demonstration Equipment** — Provided mechanical polyethylene mulch applicator and removal equipment and transplanter to eight growers for demonstration purposes.
- **Horticulture Society Support** — The Department provided support to the horticultural societies (45) through various grants, totalling over $21,900 for prize money, memberships and judges. The societies provide an annual bursary of $300 to a third year student of the Agriculture Degree Course. The 86th Annual Conference for the socieities was held in Flin Flon with a total registration of 175.
- **Hort-Line** — Office space was provided for the operation of a Hort-Line by the Strawberry Growers' Association of Manitoba, to provide information on location and harvest dates for strawberry and raspberry U-Pick operations. In the six week period of operation, over 4,600 calls were handled.

Northern Horticulture

The Northern Horticultural Program was established to assist northern residents to develop their skills in the production of horticultural crops and to improve the availability and use of locally grown food production. Activities included: gardening demonstrations in 17 communities, youth gardening projects in 13 communities and technical backup through on-site visits and telephone consultations with 36 communities. Production workshops were held in 26 communities, and semi-commercial production demonstrations (including potatoes, vegetables, forage seed and barley) in seven communities. TV, radio, the press and publications were also used in the distribution of information. This program is carried out in close cooperation with the Frontier School Division and Health and Welfare Canada's community health program.

Field services included landbreaking, preparation, and equipment for summer tillage for home gardens.

Regulatory Services

The horticultural section provides the administration and services required for three provincial acts:

- Manitoba Fruit and Vegetable Sales Act
- Manitoba Horticultural Societies Act
- Manitoba Plant Pests and Diseases Act.

Activities included the inspection and certification of 29 nurseries, review of the acts to determine their compatability with the Charter of Rights, participation in the plant pathology portion of the training requirement of pesticide dealers and applicators requesting licences, and the training for applicants wishing to obtain a Tree Pruners Commercial Licence.

Diagnostic services were also provided to Manitoba Natural Resources for 3,300 samples of diseased elms as required for the administration of the Dutch Elm Disease Act.

Marketing — Vegetables

Department marketing activities continued in conjunction with the Manitoba Vegetable Producers' Marketing Board. Activities included a 20-foot display erected at the Canadian Fruit and Vegetable Wholesalers' Association in Toronto, exhibition displays, shopping mall displays and the production of a new "availability chart" showing when Manitoba vegetables were available through the year.

Marketing staff also carried out promotional work with the Fresh For Flavor Foundation, the promotional arm of the Canadian Horticultural Council. Assistance was provided in the production of U-Pick and fresh vegetable stand directories, U-Pick maps and recipe pamphlets for strawberries, and a directory for the nursery and landscape industry.

Forage and Pasture Management

The Grassland Section coordinates and develops regional forage programs to meet the needs of Manitoba livestock producers. Some 2,800 producers have been directly involved in these projects in the past 10 years.

Regional staff administer these projects and the Department pays the operating costs. Farmer participants supply the cattle for the trials. On-farm demonstration projects are conducted as a second stage of this program. The total program has been most beneficial in demonstrating the benefits of good forage management, involving grass, legumes and annual crops.

Agri-Food Forage Projects

A Forage Production Technology Transfer Project, under the Canada-Manitoba Economic and Regional Development Agreement, was designed to improve the production, handling, and use of forages through forage/livestock demonstrations, and to investigate and demonstrate economical methods for on-farm storing, protecting, processing and feeding forage. The project also demonstrates recommended practices to improve the use and management of pastures. In addition, it demonstrates alternate hay and forage marketing systems. This project is operated by regional staff with the Grassland Section acting as a resource to the regional demonstrations.

In the first full year of operation, a large number of demonstrations were initiated throughout Manitoba, with a very good acceptance of the project by farmers and staff.

Investigational Trials

Major emphasis was placed on evaluating annual forage crops for production potential in 1985. Ten trials containing 19 different annual forage crops were established throughout southern Manitoba and the comparative yield potential was assessed. A further 10 demonstration trials were established to illustrate the adaptability and yield potential of various perennial grasses and legumes.

A series of three salinity tolerance trials were established in conjunction with the Soils Section. In addition, fertility trials were established on a Kentucky bluegrass seed stand and a timothy seed field.

Six trials were conducted in cooperation with the Weeds Section to evaluate the effect of various herbicides on seedling and established grasses and legumes. This work adds significantly to the knowledge of forage herbicide tolerance and should lead to the licensing and recommending of several herbicides for improved forage production.

Tame Hay Production

Tame hay was produced on 546,000 hectares (1,350,000 acres) in 1985. This represents a 50,000 hectare (124,000 acre) increase from 1984. Production of 2,177,000 tonnes (2,400,000 tons) was four per cent higher than 1984 due to the increased area harvested. The average yield was slightly changed at 3.99 tonnes/hectare (1.78 tons/acre).

While the majority of the tame hay produced was consumed by Manitoba livestock, there was a strong demand for hay from the drought-stricken areas of southeastern Alberta and southwestern Saskatchewan. This resulted in a strong cash market with hay prices averaging between $60 and $66 per tonne ($55 and $60 per ton).

Forage Seed Production

Total production of all forage seeds, including foreign and public varieties, decreased from 7 million kilograms (15,616,000 pounds) in 1984 to 5.5 million kilograms (12,223,000 pounds) in 1985. In spite of the drop in production, total farm value increased from $5.6 million to $6.2 million in 1985. The drop in production was mainly due to a dry spring and excess moisture during harvest. The largest drop in production occurred in the timothy crop where production was down by 32 per cent from 1984. In total, the 1985 forage seed crop decreased by 22 per cent while the total farm value increased five per cent over the 1984 figures.

The biggest increase in price occurred on Kentucky bluegrass where the price jumped from 35 cents in 1984 to $1.35 per pound in 1985. Significant price increases also occurred with alfalfa, single cut red clover, sweet clover, bromegrass and timothy.

Table 13
1985 Production and Farm Gate Prices

	Production		Price Per		Farm Value
	kilograms '000	pounds '000	kilogram $	pound $	($000)
Alfalfa	850	1874	2.65	1.20	2,249
Birdsfoot Trefoil	170	375	2.76	1.25	469
Bromegrass	45	99	1.32	.60	59
Kentucky Bluegrass	50	110	2.98	1.35	149
Meadow Fescue	55	121	.99	.45	54
Single Cut Red Clover	250	551	.88	.40	220
Sweet Clover	1,400	3,086	.49	.22	679
Timothy	2,725	6,007	.84	.38	2,283
	5,545	12,223			6,162

Canadian Forage Seed Project

This project was established to multiply and distribute foundation seed of the older Canadian forage varieties. The reduction of applications received for foundation forage seed this year under this project indicates a trend away from the older varieties involved. However, the demand increased for the newer varieties handled through the SeCan Association and for the contracting of private varieties within the seed trade. During 1985, 68 Manitoba orders were filled through the Canadian Forage Seed Project, amounting to 3,700 kilograms (8,300 pounds) of seed. This was 80 per cent of the 1984 Manitoba distribution.

Weed Control

Above average growing conditions and strong crop competition resulted in excellent control of weeds on cropland in 1985. However, fall weed control operations were hampered by the late harvest and the early onset of winter.

Investigations

Several evaluation trials were conducted to support weed control recommendations and to develop control methods for specific problem weeds. These included trials to determine/evaluate:

- tolerance of established forages to herbicides
- tolerance of forage seedlings to herbicides
- sweet clover control in alfalfa
- herbicide combinations for use in soybeans
- control of red bartsia in alfalfa
- weed control in onions
- yellow nutsedge control
- Canada thistle control in timothy
- herbicides for stork's bill control

Such trials resulted in a cooperative program with Agriculture Canada and Union Carbide Canada Limited to obtain registration for bromoxynil use on onions. Availability of this herbicide as a replacement for Randox (no longer available) would result in annual savings to onion growers of $285,000 through reduced weed control costs.

The potential use of bromoxynil for sweet clover control in seedling alfalfa was identified by investigational trials. Estimated savings to alfalfa seed producers are $180,000 annually, due to higher seed yields and higher seed quality (less downgrading).

Investigational trials also resulted in the development of recommendations for the use of Sencor and Lexone alone or in combination with Banvel for the control of seedling bladder campion in wheat and barley.

Manitoba Agriculture participated in a cooperative program with Agriculture Canada and Ciba-Geigy Canada Limited to obtain registration of Blagal for control of broadleaf weeds in established forage grasses.

Biological Control

Monitoring continued on insects previously released for control of leafy spurge, nodding thistle and sow thistle. Biological control is slow and difficult to establish but has the potential to provide environmentally safe methods of weed control. It can also address

weed problems in inaccessible areas of pastures and rangelands.

Two additional releases were made in 1985 with the cooperation of Agriculture Canada:

- In cooperation with the Pembina-Manitou Weed Control District, a pathogen was sprayed to control roundleaf mallow in a flax field. Activity was excellent and additional testing will be conducted in 1986.
- In cooperation with the Stanley-Thompson and Brandon-Cornwallis Weed Control Districts, 700 larvae of the spurge hawk moth were released near Morden and Brandon. Survival will be monitored in 1986.

A field day organized by the Pembina-Manitou Weed Control District enabled farmers to collect nodding thistle heads containing the nodding thistle seedhead weevil for transport back to their farms.

Computerized Weed Control Recommendations

The Herbicide Usage Planner on Telidon was accessed 11,400 times during 1985/86. Information available was expanded by adding recommendations for weed control in corn and by adding a wild oat cost calculator.

Programs for use on microcomputers were also developed, including sprayer calibration, a herbicide price catalogue and a wild oat competition calculator. These were designed to assist farmers in making decisions on whether or not wild oat populations warrant spraying crops, based on crop prices and herbicide costs.

Weed Control Districts

Thirty-three Weed Boards operated in 1985. Weed supervisors enforced the Noxious Weed Act, supervised municipal weed control programs and assisted farmers and homeowners by providing weed control information. Weed supervisors made 3,430 farm visits, identified 2,286 weed samples, calibrated 175 sprayers and responded to more than 27,000 weed control inquiries. Total weed district expenditures of $1,472,331 were supported by weed district grants totalling $333,518.

Weed districts conducted an active pesticide container disposal program. Approximately 315,000 containers were collected, crushed and disposed of, an increase of 40 per cent over 1984. Pesticide residues collected from the containers were disposed of by the Department of Environment, Workplace Safety and Health.

Manitoba Agriculture provided technical support to weed supervisors, including two one-week training seminars and a correspondence training course. Nine supervisors successfully completed the training course.

Weed Fairs

Two-day Weed Fairs at Brandon's Keystone Centre and the Winnipeg Convention Centre drew a total attendance of more than 5,700. A total of 109 exhibitors provided information on control of weeds and other pests, fertilizers and related equipment. Exhibits on biological weed control and weed identification were of particular interest to those attending.

Concurrent program sessions and handout material covered a variety of topics including the Safe Use of Pesticides, Semi-Dwarf Wheat Production, Intensive Crop Management, Weed Control in Forage Crops and an update on new herbicide recommendations.

Herbicide Use

Although a high percentage of field crops continue to be treated with herbicides, the total quantity of herbicides appears to be declining, as herbicides which are effective at lower use rates replace older products. Farmers continue to shift to the use of postemergence herbicides for wild oat control, resulting in a decrease in the use of soil incorporated herbicides.

Herbicide injury assessment was carried out on a total of 197 plant samples submitted to the Plant Pathology Laboratory. A number of samples of wheat exhibited injury from trifluralin applied the previous year for weed control in oilseed crops. Due to dry conditions in 1984 the herbicide persisted at levels high enough to injure wheat planted into those fields in 1985.

Weed Control Extension

Weed Section staff responded to approximately 2,000 weed control inquiries from farmers, chemical dealers, weed supervisors and department staff. Staff also participated in 38 farm meetings. Information on cutting herbicide costs and determining whether to spray or not, based on weed density, crop price, herbicide costs and expected yields, was well re-

ceived. Information on these topics was also provided to farmers through press releases, radio and TV interviews and magazine articles. The work of the weed specialists was, of course, supplemented and supported by an active and on-going weed control program in every agricultural representative district in the province.

Regulatory Activities

Twelve training sessions for pesticide dealers and applicators emphasized proper calibration of spray equipment, record keeping and the safe use of pesticides. Staff responded to 14 complaints concerning licenced pesticide applicators. The problems related to herbicide injury from tank contamination, herbicide drift and misapplication of herbicides.

Staff participated in the development of a self-insurance program supported by a group policy from the Manitoba Public Insurance Corporation, to achieve significant reductions in insurance costs for aerial applicators. It is estimated that this arrangement will save the industry approximately $90,000 in 1986 and up to $150,000 per year in subsequent years.

Weed Survey

A weed survey of corn and sunflower fields conducted in 1985 revealed that green foxtail is the most abundant weed in corn, followed by red root pigweed, lamb's quarters and wild buckwheat. In sunflowers, green foxtail was again the most abundant weed followed by wild mustard, wild oats and annual smartweed species. Results will be used to assist farmers in developing control strategies for problem weeds identified by the surveys.

In other weed monitoring activities, Persian darnel was found in the Beausejour area in a sunflower field. This weed is abundant in Saskatchewan but until now has not been a problem in Manitoba. Yellow nutsedge continues to spread in fields adjacent to the Red River. This perennial is extremely difficult to control and is of particular concern to vegetable producers and market gardeners.

Engineering Services — Crops

Weed Control — Spray pattern tests were conducted on 16 new sets of sprayer nozzles. To date, of the 50 nozzle types and sizes tested, 10 have been found to produce unacceptable patterns. Pressure and height recommendations for the acceptable nozzles have been distributed to farmers, industry and agricultural field staff. Nozzle check valves were also evaluated and recommendations distributed. A section on spray nozzles and check valves was prepared for a new Agriculture Canada publication, Field Sprayers. Displays of equipment were organized for the Manitoba Weed Fairs. Field investigations of sprayer problems and new components were made, and numerous farmer inquiries about nozzles and other sprayer parts were answered. Sprayer clinics were held throughout the province, and design assistance provided to local sprayer manufacturers.

Over 150 applicators attended five commercial applicator courses.

Grain Drying — An Agri-Food project to determine minimum airflow rates for unheated air drying of wheat, barley and canola was completed. This new information was used to improve the selection of drying equipment and reduce chances of grain spoilage. Field tests were conducted on 25 bins with partially perforated floors to determine the airflow patterns and drying efficiencies as compared to fully perforated floors.

Overheating of milling wheat in heated air dryers created a concern for the Canadian Grain Commission in the fall of 1985, so a monitoring program to identify and eliminate the problem was initiated by Manitoba Agriculture engineers. Hundreds of inquiries on grain drying were received from farmers and industry reps during the wet harvest season of 1985 and throughout the winter. Advice on equipment selection, monitoring and operation was provided. A total of 30 public meetings on grain drying were held and 20 mass media items were prepared.

Horticulture — Individual engineering assistance, including building plan selection, analysis and specification of structural construction details, and specific problem solving, was provided to producers, industry, research, and other extension staff through 456 contacts and office consultations. Detailed design assistance was provided for 34 special crops structures, including potato and onion storages and greenhouses. Engineering information included structural design, refrigeration, heating, ventilating, and humidification.

A simple bruise detection system, which could be used by potato growers to monitor blackspot bruise during harvesting, was developed and tested. The system was demonstrated at a grower field day and information presented to the growers at two producer meetings. A worksheet to simplify potato harvester chain speed adjustment was developed and presented at two producer meetings.

Engineering assistance was provided on two research

projects. Equipment for the mechanical removal of plastic mulch from vegetable crops was successfully tested. The effect of varying the relative humidity of the air used to cure and store cooking onions was also monitored.

Work started on a project to monitor the performance of corrugated metal air ducts used in potato storages. The results will be used to further refine the design of potato storage ventilation systems. Variables such as increased air velocities and new air duct designs are being investigated.

Other — A tractor mounted soil sampler design was completed and plans prepared to enable farmers to build them in their own shops.

Revisions were made to a number of publications and a chapter on hay and silage equipment was prepared for the Forages '87 Homestudy Course.

Consultations were held with numerous manufacturers, suppliers and farmers on a wide variety of field machinery topics. Assistance and advice were provided to PAMI, the University of Manitoba and other agencies in selecting research projects and by providing technical information to them.

Sampling and testing of diesel fuel storages assisted farmers, dealers and fuel suppliers to identify and eliminate diesel fuel problems. The incidence of fuel-related engine problems was sharply reduced from the previous year. Continued monitoring of farm diesel fuel supplies is planned.

Soil and Water Management

Department responsibilities in this area include fertility, soil management and on-farm water management.

Irrigation

Fourteen applications for irrigation rebates were processed and approved for payment for a total grant of $27,671. The majority of the new irrigation projects were for small fruits such as strawberries. One application was for cereals irrigation out of a consolidated surface water body. The acreage under irrigation increased marginally from the 10,800 hectares (27,000 acres) the previous year.

Drainage

Field surveys and ditch design services were concentrated in the Manitoba lowlands, primarily the Interlake and Red River Valley regions. Activities elsewhere in the province included water conservation and consolidation of surface water bodies. Forty-seven quarters were surveyed and designs completed. Farm operators were charged a fee of $30 per quarter resulting in a revenue of $1,410 to the government. Eight drainage surveying schools trained some 50 farmers and municipal staff in the use of surveying equipment.

Soil Survey

The systematic inventory and evaluation of Manitoba soil resources is a continuing program supported jointly by Manitoba and Agriculture Canada. The University of Manitoba, through the Department of Soil Science, provides office and laboratory space and administrative services related to special projects on behalf of soil survey. The major function of the soil survey continues to be provision of essential soil resource data and related research, and land evaluations for use by the public and provincial government departments having land use and planning functions.

The main emphasis of the 1985/86 inventory program focused on the detailed resurvey and land evaluation of selected areas in southern Manitoba. These resurveys at 1:20,000 scale provide more detailed soil resource information to assist in the planning, allocation, and management of land resources for agriculture, rural residential planning and intensive outdoor recreational uses. Approximately 74,590 ha (184,320 acres) were surveyed at a detailed scale of 1:20,000 and 48,430 ha (119,600 acres) were surveyed at a reconnaissance scale of 1:50,000. The projects included agricultural resurveys for special crop production, conservation, and irrigation in the municipalities of Dufferin, Grey, Roland, Lorne, and South Norfolk; for peatland surveys in the municipality of Whitemouth; for planning and assessment resurveys in the municipalities of Macdonald, Woodlands, South Park (L.G.D.), and five towns; for forestry surveys in the Duck Mountain Provincial Forest; and for environment in the Inco-Spruce Point Mine area near Thompson.

Interim reports and maps are being prepared for all 1985 projects. The reconnaissance soil survey report was published for the Waterhen N.T.S. sheet (63B). Detailed reports were published for the towns of Minnedosa and Hallboro, and Altona, Gretna, Emerson, Ile des Chenes, Landmark, Letellier, Rosenort and St. Jean Baptiste.

Table 14

Total Hectarage Covered

	1985-86	To date, March 31, 1986
Initial Reconnaissance	—	18,617,436
Initial Detailed Survey	—	16,460
Detailed Resurvey	74,590	1,981,862
Reconnaissance Resurvey	48,430	126,698
Biophysical Survey	—	12,521,000

The continuing program of detailed soil surveys was used by the provincial government departments of Agriculture, Municipal Affairs, Natural Resources, and Environment.

There was continued development of automated data handling capability for all cartographic information and supporting soil and related landscape data compiled by the soil survey. This capability is designed to increase efficiency of the soil survey operation and to provide more quantitative soil data to users.

The continued land evaluation studies were primarily in agriculture. The soil survey is involved in developing a data base for land evaluation through the ongoing program of detailed resurveys and through long term monitoring programs of soil temperature, soil moisture and climate relations. Soil survey data provides input for the development of various soil-climate based crop growth and yield models for quantitative agricultural land evaluation.

Land Use Planning

Section staff and regional land resource specialists represented agricultural interests in subdivision and land use issues relating to the Planning Act and provincial land use policies. Assistance and advice was given to planning districts and municipalities in developing basic planning statements and development plans. Activities included:

- Winnipeg-Selkirk Highway Study — major upgradings and expansion to be made on existing rights-of-way with few re-routings to sever farmlands.
- Letellier-St. Leon Hydro Transmission Line — proposed routing to be allocated on road allowances and drains, with no diagonals across farmlands.
- Rail Line Abandonment — halting of proposal for recreational use of two abandoned rail lines crossing prime farmlands.
- Clean Environment Commission Hearings on City of Winnipeg Sewage Sludge Disposal —City continues to be limited to lifetime land application limit of 56 tonnes/hectare dry sludge, with no re-application.
- Organic Soil Management and Peat Burning — Published map of Eastern Manitoba Peatlands.

Land Use Management

One of the major functions in this area is to provide technical service to the five agricultural regions in the province. In this regard, specialists participated in 100 rural extension meetings and field days which were attended by over 3,900 farmers. Staff provided technical soils assistance to (a) the Conservation Districts by participating in two multi-discipline land use studies; (b) the Excarpment Headwater Control Study and (c) the Agri-Food Soil and Water Management projects, through the development of guidelines for use by the various associations, with emphasis on reduction of tillage. Some 25 demonstration/investigation projects on soil fertility, conservation and salinity management were conducted throughout the province. In recognition of the frequently recurring wet conditions in much of the Manitoba lowlands, staff initiated the preparation of guidelines for reclamation of rutted fields.

A survey was developed and implemented to determine the kind and amount of tillage that is common practice throughout the province. This survey provides guidance with respect to development and implementation of erosion control programs.

During the 1985/86 fiscal year, the Provincial Soil Testing Lab processed a total of 21,800 samples composed of 19,800 soil samples, and 2,000 tissue samples. This represents a decline of about 20 per cent from the previous year. This decline was due entirely to wet conditions in the fall of 1985 which prohibited farmers from soil sampling.

Revenue bearing samples totalled 12,980 soil and 640 plant tissue samples. The balance of the samples analysed were non-revenue research samples. Total revenue transferred to the Department of Finance from the laboratory was $140,950, down 21 per cent from the previous year. The total operating costs of the laboratory amounted to $193,225, down about seven per cent from the previous year.

There were five custom soil sampling operators set up under the Agri-Food Agreement. The operators charged a fee for service and submitted all samples to the Provincial Soil Testing Laboratory. There was a marked increase in soil samples submitted from one area. The other areas were adversely affected by the wet fall.

Agricultural Crown Lands

Land Use

Agricultural Crown Land uses .76 million hectares (1.88 million acres) for livestock grazing, hay production and annual cropping. The Branch actively participates in the Crown Land Classification Committee (CLCC) system through which land use decisions are made and lands are processed for the Crown Land Sale Program and the Local Government District Exchange Program.

Through CLCC activities, 5.7 million hectares (14.1 million acres) of Crown land have been classified as to their recommended use; Crown Land Plans have been completed for nine planning districts, 11 districts are currently under study, and three district plans have been submitted to the Provincial Land Use Committee (PLUC) for review and approval.

Since the inception of the Crown Land Sales Program, the CLCC has reviewed and approved the sale of 1,284 parcels or 74,489 hectares (184,061 acres) and disapproved 533 parcels of 26,570 hectares (65,653 acres).

There has been a steady decline in the number of parcels requested for sale in recent years, from 750 in 1980 to 62 in 1985.

Local Government District Lands

A Local Government District Task Force was established in 1979 to negotiate with each Local Government District Council relative to the return, exchange or sale of Local Government District vested lands.

In cases where Local Government Districts prefer to see their agricultural lands administered by the Department of Agriculture, they are included in an Agricultural Agreement between the Department and the Local Government District. These lands are administered under the same conditions as apply to Crown lands and are eligible for all programs, including the Crown Land Improvement Program.

Leases and Permits

The total number of forage lease dispositions decreased by four in 1985 and the total acreage under Forage Lease decreased by 6,032 hectares (14,900 acres).

In 1985 there were 61 in-family transfers of leases involving 262 parcels of land, compared to 35 in-family transfers in 1984 involving 174 parcels of land. There were also 11 Unit Transfers in 1985 involving 31 parcels of land, compared to seven Unit Transfers in 1984 involving 37 parcels of land.

Voluntary surrenders were actioned on 75 leases involving 181 parcels. There were 44 leases involving 158 parcels cancelled for non-payment of rent, and six leases involving 21 parcels cancelled for non-use.

During the year, 501 quarters were advertised for lease or permit. Of these, 127 quarters received one application only, and 118 quarters received no response. Multiple applications were received on 227 quarters and 29 quarters were withdrawn from allocation.

Agricultural Crown Lands Advisory Committee

A total of 47 allocation appeals involving 68 quarters were heard during 1985. The appeal hearings resulted in 39 (57%) of the allocated quarters being upheld and 29 quarters (43%) of the allocated quarters were changed.

Two appeals against cancellation of forage leases were heard by the committee. The committee recommended that cancellation proceedings regarding these forage leases be withdrawn. Two appeals on

Table 15

Leases and Permits — 1985

Type	Number	Hectares	Acres
Forage Leases	2,641	639,995	1,581,406
Casual Grazing Permits	48	2,672	6,602
Renewable Grazing Permits	162	6,325	15,629
Renewable Hay Permits	1,211	64,425	159,193
Casual Hay Permits	452	24,159	59,695
Cash Rental Agricultural Leases	238	24,330	60,118
Special Leases	2	117	289
Totals	**4,754**	**762,023**	**1,882,932**

partial lease cancellations were also heard. The committee upheld the department's recommendation to cancel part of the two forage leases.

In addition, the committee reviewed a cancellation appeal which had the decision deferred. It was recommended by the committee that the forage lease be cancelled.

Purchase of Improvements

When a lease expires or is terminated voluntarily, structures such as fences, shelters, forage stands, corrals and watering facilities are purchased by the Province from the lessee. The total of improvements purchased in 1985 was $31,033. Crown-owned improvements valued at $25,294 were sold to lessees acquiring lands in 1985.

Carrying Capacity of Grazing or Hay Lands

As of December 31, 1985, the total rated carrying capacity of all lands under Forage Lease was 640,013 animal unit months. In addition, lands under various annual permits had a combined rated carrying capacity of 63,731 animal unit months.

It is estimated that the actual carrying capacity is approximately 25 per cent greater than the ratings determined by the Branch. Therefore, Crown lands under hay and grazing dispositions support 879,680 animal unit months (or meet the annual forage requirements of 73,306 head of livestock).

Crown Land Improvement Program

All development completed under this program in the 1985 calendar year was done by machine, as chemicals were not used. Conditions were abnormally dry during the spring season making windrow burning hazardous and breaking more difficult. The fall season turned out exceptionally wet with an early snowfall in the Eastern Region, making winter clearing more difficult. The Western Region experienced a normal dormant clearing season. In 1985, this program was made available to 155 new clients on 296 quarter sections, with a total value of $362,346; 815 clients were carried over from previous years on 2,022 quarters totalling $209,764. In 1985 there were 1,859 hectares (4,594 acres) cleared; 2,180 hectares (5,387 acres) were broken; and 2,674 hectares (6,607 acres) were prepared for seeding at a cost of $572,110.

Community Pastures — PFRA Administered

There are 24 community pastures covering 177,152 hectares (437,743 acres) in Manitoba. Clients are charged a user fee to recover the annual operation cost of the pastures. Rates for 1985 were increased.

Table 16

Community Pasture Statistics

Operating pastures	24	
Hectares (acres)	177,152	(437,743)
Carrying Capacity	40,450	
Patrons	1,194	
Cattle and Calves	60,630	
Horses and Colts	1,558	
Breeding Cows	21,949	
Losses	404	
Bulls (includes rental)	843	

The Municipal Grants Act, administered by the federal Department of Public Works, has not been amended to date to include municipal land for payment of real property tax. Negotiations are still going on with the municipalities, Province and P.F.R.A.

The only two cooperative pastures in the province are the Shoal Lake Hay and Grazing Co-op Ltd., with 1,722 hectares (4,255 acres) and the Ralph Connor Grazing Co-operative, which has 1,919 hectares (4,742 acres). Both are located in the Interlake Region.

Tree Covered Rangeland Improvement Project

In November 1979, the Agricultural Crown Lands Branch was given the responsibility of the financial administration of the Tree Covered Rangeland Improvement Project of the Canada-Manitoba Subsidiary Agreement on Value Added Crops Production (Agro-Man). This project was a five year program with a termination date of September 30, 1985.

Two year interest rebate assistance was provided to farmers who borrowed money to develop their privately owned tree covered rangelands. Land development stages of clearing, breaking and seed bed preparation were eligible for assistance. A total of 6,895 hectares (17,037 acres) were cleared.

During the 1985 calendar year, three clients completed such development on 37 hectares (92 acres) with payments to contractors totalling $10,400. Capital borrowed was $10,400, and the interest dollars rebated totalled $30,275.

Training and Development

Farm Management

The main objective of the Department's farm management service is to enhance the efficiency and growth of the farm sector by providing farm business management services, by developing resource materials, by developing a training program and by extending information to staff and farmers.

Major input was directed towards the development and production of material for Farm Business Group training programs. A series of five first-year lessons were revised. In addition, three second year lessons and two optional lessons, along with audio-visuals, worksheets, and training and instructors' manuals, were produced. Five in-service training courses for instructors (one in each region) were conducted. Regional staff organized and delivered instructional material to almost 700 farmers and farm couples.

Fifteen agricultural software programs were developed either for research and investigation or to assist staff in counselling and advising farmers. It is estimated that 35 agricultural software programs developed by section staff were being used in the farm management program. Major efforts were directed toward standardizing and testing existing agricultural software programs. Additional programs are being developed to support staff counselling and farmer training.

Budgeting guideline worksheets for projecting farm plans were developed and revised. Thirty-one thousand copies of enterprise budget guidelines on 11 farm enterprises were distributed to farmers. In addition, planning worksheets and computer decision-making programs were designed to assist staff in counselling farmers in sound financial decision-making. Software programs on debt carrying capacity, enterprise selection, breakeven analysis, leasing vs. buying land, farm record analysis and credit commodity loan analysis were developed.

Staff investigated, researched, and reported on the following topics: analyzing agricultural software and hardware, farmers in financial difficulties, U.S. farm policies and their impact on farmers, a format for analyzing cost of production on leafcutter bees, federal budget and its impact on the farm income and structure, income tax, fuel tax rebate, listing Federal and Provincial Sales Tax, hog weanling cost of production, review of F.C.C. agricultural credit proposal, Bankruptcy Act, mutual funds as an alternative investment opportunity, price cycles, risk management, machinery economics, financial management and self-learning farm management programs.

During the year, viability assessments were completed on 24 potential immigrant farmers, a reduction from 33 the previous year. This service assists the Federal Department of Immigration in evaluating the suitability of applicants.

Farm Management staff were involved in various capacities in many organizations, including the Manitoba Indian Agricultural Program, the Agricultural Economics Committee of the Professional Update Training Program, the Agri-Food subcommittee of Human Resource Development, the Western Farm Management Extension Committee, M.A.S.C.C. subcommittee on Agricultural Economics, Beef Extension Task Force, Beef Economics Task Force, Farm Fuel Tax Provincial Committee, Dairy Consult Committee and three farm management study groups.

Regional Activities

Reduced net farm income and restricted cash flow continued to put financial pressure on farm businesses during 1985-86. This situation prompted all regions to put increased emphasis on farm management programs, with regional staff acting in teams to help alleviate the most stressful situations.

A substantial increase in intensive in-depth counselling was reported right across the province. In total, some 1,340 in-depth counselling sessions were completed in an effort to assist those farm families under the most severe financial pressure.

Stress among farm families was noticeably present, even in cases of moderate financial difficulty. Counselling was helpful in these cases, but to deal with larger numbers, stress management was made the theme of several regional Farm Family Seminars.

The Farm Business Group program was successful in all regions, as an effective method of presenting detailed management information to large numbers. Close to 700 farm families were actively involved in 52 groups organized throughout Manitoba. A significant spin-off from this program resulted when numerous graduates of the program came forward for more detailed information on a wide range of farm management topics.

Other regular farm management extension activities included programs in marketing, accounting, estate planning, retirement, tax planning, farm business arrangements, computerization, insurance and farm law. In addition, regional staff provided extensive support to the farm debt review panels convened during the year.

Farm management programs were greatly enhanced by the provision of micro-computers in most of the Department's rural offices. This was particularly true for the in-depth counselling that was so prevalent in each region. In many cases more detailed information was made available to the client and in all cases the efficiency of the service was greatly improved.

4-H and Youth (1985-86)

The objective of the 4-H program is to promote leadership, citizenship, responsibility and independence in rural and northern Manitobans through achievement in skill development projects within rural community-based clubs.

The 4-H structure extends from the grassroots level to a national organization. Volunteer councils exist at the district, regional and provincial levels, with representation on the Canadian 4-H Council. These councils address programming needs for their specific areas. Manitoba Agriculture staff, which includes program assistants, home economists, agricultural representatives, regional 4-H specialists and staff in the Winnipeg 4-H office, provide support to their respective councils.

Provincial Activities

The central 4-H office is responsible for coordinating all provincial, national and international activities. The office also provides support to district and regional 4-H staff, while directly supervising the Northern 4-H program.

Manitoba 4-H Council provides volunteer input into provincial 4-H programs and policies, as well as initiating new projects and events. The council, regionally represented by six 4-H leaders and six 4-H senior members, and two government representatives, has three major goals. They are:

- to improve volunteer participation, development and learning
- to enhance national and international 4-H relationships
- to encourage participation and support from corporate sponsors.

Volunteers and staff coordinated, planned and implemented 30 provincial and national events involving over 430 members and 130 leaders.

The annual meeting of the Manitoba 4-H Council was again a highlight of the 4-H year. Region and district representatives provided input into programming through resolutions. Over 100 leaders, senior members and out-of-province delegates and staff attended the March conference with the theme "You, Me and Us, the 4-H Team!"

In addition to regular committees, the Manitoba 4-H Council created two new committees — Program and 75th Anniversary. The Program committee is an initiative and evaluative group, coordinating all program activities of the Manitoba 4-H Council. The 75th Anniversary committee was formed to generate ideas and make plans to celebrate the 75th anniversary of 4-H in Manitoba in 1988.

In 1985/86, a training program was developed and implemented for junior leaders to coincide with the release of the new project manual "Leadership On the Go." Ninety-seven junior leaders were registered this year. Two hundred and one Manitoba 4-H leaders were recognized through Canadian 4-H Council Leadership certificates.

The Manitoba 4-H Council, assisted by corporate sponsorship and club donations, provided travel opportunities for 111 members and 53 leaders, both within and outside the province. Manitoba 4-H members and leaders travelled to Ontario, Alberta, Nebraska, British Columbia, Saskatchewan, Washington D.C., Europe, United Kingdom, New Brunswick, Michigan and Nova Scotia. As well, members and leaders travelled on a variety of Open House Canada Exchanges.

The Manitoba 4-H Council was extremely active with celebrations to recognize International Youth Year. In a special effort to recognize youth in the 4-H program, the Manitoba 4-H Council encouraged clubs and districts to participate in a special Provincial 4-H Bonfire ceremony. 4-H members, leaders, families and friends joined together for this event in Melita, Russell, Teulon, Carrot Valley, Rock Lake, Ste. Jean, Pelican Lake, Elm Creek, Manitou, Fisher Branch, Neepawa, Pukatawagan, Wanless, Graysville, Dauphin, Grand Rapids, Birds Hill, Portage la Prairie and Souris.

The Manitoba 4-H Council also sponsored a special conference entitled "Youth Look At the Future of Agriculture." Twenty-eight past and present 4-H members spent four days discussing the local, national and international issues that influence the role of agriculture in Manitoba.

Other provincial 4-H events offered to members included: Provincial 4-H Dairy Show, Provincial Livestock Judging Competition, Clothing Speaks Conference, Community Services Project Competition, Provincial 4-H Sugar Beet Achievement, Provincial Public Speaking Competition, Provincial 4-H Horse Show and City Survival Weekend. Two new sponsored events offered were the Provincial 4-H Demonstrations Competition (CN Rail) and Provincial Interme-

diate Public Speaking Competition (Radio Southern Manitoba).

Four Manitoba 4-H scholarships were awarded: Canadian National Exhibition ($1,000), Hoechst Canada ($500), Gulf Canada Citizenship Study Award ($1,000) and Manitoba 4-H Ambassadors ($100). The latter two were new in 1985.

The Manitoba 4-H Council is continuing to use the slogan "4-H — for Friends, Fun and Learning." The Minister of Agriculture officially declared November 4 to 10, 1985, Manitoba 4-H Week. Promotional efforts were assisted by the provision of pencils, stickers, placemats, nametags, memo pads, invitation cards, new promotional pamphlets, radio and newspaper releases.

The Manitoba 4-H Council celebrated its first anniversary on March 5, 1986. The statement of revenues and disbursements for the year ending December 31, 1985 showed a surplus of $3,093 (which included 30 donations).

The Manitoba 4-H Ambassadors, now active for eight years, boasts a membership of 26 ex-4-H'ers. The group holds an annual meeting plus four business meetings each year. As well as participating and assisting with district and regional activities, the Manitoba 4-H Ambassadors are responsible for the Provincial 4-H Public Speaking Competiton, City Survival Weekend and their Annual Retreat.

Six thousand copies of the tri-yearly magazine Contact were produced and distributed, along with the production of 500 copies of the Manitoba 4-H Review.

The Winnipeg 4-H Office continues to assist the Manitoba Rural Youth Association, and spent significant amount of time on the National Rural Youth Conference held in Winnipeg in December 1985.

4-H Projects

The Department supplied over 63,000 copies of project manuals, record books and resource material to a project enrolment of 5,950. Manitoba 4-H has 5,471 members in 296 clubs, guided by over 2,000 adult volunteers.

New materials provided this year included:

Financial Management: "Making Your Money Count," piloted through the province

Beef: Feeding 2 (Unit 4) slide/tape sets and lesson material made available

Microwave Cooking: Material was written and distributed

Rabbits: Material purchased from Alberta 4-H and distributed

Junior Leader: "Leadership On the Go." New manual written and distributed

Outdoor Living: "Making Way for Wildlife," developed by Canadian Wildlife Service, Department of Natural Resources, Ducks Unlimited, and Manitoba Agriculture

Staff Training

Manitoba 4-H specialists attended the western provinces 4-H staff meeting in Alberta, September 23-26, 1985. Four 4-H specialists meetings were held.

Staff attended courses in Writing Techniques, Foundation Investments, Managing Volunteers, Native Awareness, Dealing with the Native Public and Motivation of Volunteers. Winnipeg staff presented "Motivation of Volunteers" at the Agricultural Institute of Canada Conference in Prince Edward Island and at the Atlantic Leaders Forum in New Brunswick.

Manitoba 4-H staff provided input to three National 4-H Conferences, the Annual Meeting of the Canadian 4-H Council in Quebec City, as well as fall and spring committee meetings of the council in Toronto.

Northern 4-H Program

The Northern 4-H program boasts a membership of 193 supported by 53 leaders in 4-H clubs located in York Landing, Split Lake, Thompson, Leaf Rapids, Carrot Valley, The Pas, Grand Rapids, Flin Flon, Easterville, Snow Lake and Cormorant. In addition to their local project meetings, northern members participated in a variety of regional and provincial activities that included: 10 members attending Camp Wannacumbac at Clear Lake, 16 members participating in the Northern Regional 4-H Public Speaking Competiton and Communications Weekend at The Pas, and four nothern 4-H members in the Provincial Public Speaking Competitons — two in the senior and two in the intermediate.

Members also participated in a Lakehead Tour, the Youth Look At the Future of Agriculture conference, Clothing Speaks conference, Western Provinces Seminar, Provincial 4-H Horse Show, and the Provincial Livestock Judging Competition.

Two Community Services Projects from The Pas area were entered in the competition this year. Leader training, development and recognitition continued to be an important aspect of the Northern 4-H program. Highlights of the leaders' program included a Head Leaders' Meeting for Thompson area leaders, a Thompson and area Project Leaders' Workshop, Leader involvement in Public Speaking Competition

and Northern Leader representation at the Western Provinces Leaders' Forum, the Discover Manitoba 4-H Tour and the Weekend Salute.

In addition, five Northern 4-H leaders attended the Annual Meeting of the Manitoba 4-H Council.

Regional 4-H Activity

All regions carried out an extensive and comprehensive program at the district and regional levels. Activities were varied and wide ranging for a membership that increased somewhat in two regions, but declined in three others. Included in the general activities were sporting events, camps, rallies, member training, leader training, travel programs and the basic project work. All regions reported a high level of activity in 4-H throughout the year.

Communication projects were named as priority activities in most of the regions. They took many forms, from writing and public speaking to demonstrations and direct media work. Members and leaders realize the value of communication training and experience for all members regardless of their past experiences or their career plans.

Table 17

Manitoba 4-H Statistics

Project	1985	1984
Adopt-A-Grandparent	57	61
Beef	874	898
Clothing	791	968
Dairy	92	110
Dairy Goat	9	—
Exploring 4-H	368	305
Field Crop	30	39
Foods	798	815
Group Determined	361	521
Handicrafts	450	475
Home Design	96	92
Horticulture	91	101
Junior Leader	104	105
Light Horse and Pony	663	660
Mechanics	224	205
On Your Own	19	49
Outdoor Living	138	197
Photography	148	165
Rabbit	46	—
Self Determined	66	68
Sheep	—	—
Sugar Beets	41	58
Swine	37	36
Woodworking	447	526
	5,950	**6,454**
Number of Male Members	1,948	2,109
Number of Female Members	3,523	3,839
Total Number of Members	**5,471**	**5,948**
Number of Clubs	296	313
Number of Leaders	2,001	2,120
Number of New Leaders	685	715
Number of New Members	1,709	2,108
Average Age	11.9	12.0
Average Tenure	2.9	2.9

Regional and district 4-H councils continued to play a very active part in planning and operating 4-H activities in all five regions. These coordinating groups provided added experience for all participants in organizing and carrying out their own programs — all part of the "learn to do by doing" theme.

In the Northwest region, 1,015 club members, guided by 424 adult leaders, carried out an active program with several new features added this year. Some of the more successful 4-H programs included "Building on the Positive," motivation, marketing 4-H and sharing ideas.

An increased club enrolment in the Southwest region saw their membership total reach 1,622; their leaders number 585. They reported an active year in all activities, with highlights that included executive training workshops, livestock judging clinics, a junior conference and a senior selection weekend. These and other program activities offered different development opportunities for all participants.

Council support to 4-H was particularly evident in the Central region where all ten agricultural representative districts had 4-H councils and added support came from the regional 4-H horse leaders' council. Nine rallies were held in the region. In place of the regular regional camp program, two Central regional educational weekends were organized for a large number of selected members. The two new activities planned for the next year are a regional beef show and a regional leaders' conference.

Forty-eight clubs with a membership of about 800 participated in an active year in the Interlake region. Their year's work was climaxed by some 45 achievement day programs, some of which were combined with fat stock shows and other regional activities. Interlake 4-H'ers were active in all the regular activities and, for some, the highlight was participation in one or more one-day workshops. These programs involved 250 members and leaders and dealt with topics that included demonstrations, meeting management, livestock judging, public speaking and specific project related items.

In the Eastern region 4-H action involved 567 members and 176 leaders in 34 clubs. Many successful programs were carried out to further develop the capabilities of the members and the leaders. Three regional conferences supported this objective. They included a regional leaders' conference, a junior conference and a seniors' selection conference. The Eastern region is the only region to operate its own camping program, allowing 4-H members and leaders to enjoy the benefits of such a program along with the experience of participating in the planning and the operation of this activity.

Home Economics

Home Economics Services in rural Manitoba were delivered by 17 extension home economists in Manitoba Agriculture with support from the home economics section, Manitoba Health. The home economics section provided technical support, training and up-dating, resource development and program planning guidance and coordination. The field staff and the specialists worked together to identify the needs of targeted clientele and developed, implemented and evaluated programs in family resource management, financial management, housing, clothing, basic living skills and nutrition, which includes food buying, preservation and preparation.

Young or beginning farm and rural families with limited income and resources or changing circumstances were the major target groups for the preventative and remedial home economics educational programs. Help was provided on a one-to-one basis to people requiring crisis intervention. During the 1985/86 year, home economics programs in rural Manitoba reached a total of 55,215 people.

Identifying the needs of each community in a home economics district and planning programs to meet these needs were a major challenge for each home economist. Identification of needs may be done through a formal needs assessment, as it was in the Northwest this past year. Regular meetings with extension advisory committees, farm women's organizations and existing groups such as Ag. Societies and the Women's Institute ensure community involvement in determining program direction. They also support the staff in marketing home economics programs. In ccoperation with advisory groups and other Manitoba Agriculture staff, home economists planned regional and district seminars for rural women and/or families. Topics included stress management, farm family relationships, "Farm Women — A Valuable Asset," Women and Finances and communications.

This year home economists organized (in cooperation with representative farm women and the Portage Farm Women's Organization) the first Manitoba Farm Women's Conference. The theme of the conference, held in November, was "Making the Good Life Better."

Developmental work on a home study course, Farm Families '87 — Living Successfully, was also initiated. The Manitoba Women's Institute is the sponsoring organization.

Financial Management

Work in this area ranged from one-to-one counselling with people in financial crisis to single sessions and/or seminars for families and rural women. The focus of financial management was planning and decision-making in the selection, use and protection of financial resources, to contribute to family stability and personal fulfillment.

Home economists and agricultural representatives cooperated in the farm business group program. Second year programs were carried on with established groups and new groups were established.

Seminars and workshops focused on topics such as relationships, women and finances, time management, farm credit, planning for retirement, income tax, farm safety, record keeping, credit, kids and money and budgeting. The 1984 home study course "Only You Can Mind Your Money" was run in several districts again this year. This program has also been adapted for use in northern and urban areas.

There has been an increased community awareness of the home economists as a source of expertise in financial management. Resources have been shared with teachers, clergy and businesses such as banks, in the provision of sessions on budgeting, values, goals and consumer law. Target groups in these cases were the previously married, teenagers and high school graduates. Agencies and projects such as income security, work activity, bankruptcy offices and community consumer credit counselling have requested financial management help and information from home economists. They have also referred clients for one-to-one counselling.

Some home economists collaborated with 4-H in the development and piloting of a money management project. Support was provided from the home economics section to the Women's Institute in assessing the development of a planned program "How Safe Are Your Investments?" Field home economists also provided support to those who used this program.

During the year, home economists contacted 7,300 Manitobans to provide financial management information.

Nutrition

The focus of nutrition education programs is to help Manitobans attain the best possible nutritional level. Rural people continue to view the home economist as a source (often the only source) of reliable and accurate nutrition information.

As with the financial management program, young beginning families were the target clientele for nutritional programs. Prenatal and early-bird nutrition classes continued to be an effective method of providing nutrition information to promote eating habits that will aid in producing a healthy baby. Post partum classes, post natal mailings, infant feeding classes, breastfeeding inservices and child health clinics were vehicles for teaching new parents about up-to-date feeding practices. Consultation was also provided to directors and public health nurses.

Nutrition information targeted at young children was provided to day-cares, schools and group homes in the form of workshops. Individual follow-up and menu assessment were part of the program.

Safe food preservation and weight reduction information was provided to community groups, and to individuals. Publication distribution and fair displays also helped distribute information.

Other nutrition-related programs presented in the past year included food buying, menu planning, fitness and nutrition, and nutrition for seniors. In 1985/86, 22,270 were reached with nutrition information.

Housing

The focus of the housing program was to improve the family's ability to make housing decisions. Providing a safe, comfortable environment based on each family's financial and personal situation was the program's goal.

In the past year, information provided in the housing area dealt with stretching the housing dollar. This included information on the cost of shelter, on housing alternatives, identification and interpretation of housing/financial assistance programs, cutting utility costs, energy efficient furnishings and simple home repairs.

This information was provided in one-to-one consultation, workshops such as the "Repair Fair" and other sessions with community groups. Many enquiries related to appliance selection and remodelling information. In 1985/86 the housing program reached 1,868 people.

Clothing

In 1985/86 clothing programs were aimed at helping families manage their clothing selection. Families were helped with wise clothing purchase/construction decisions and informed about proper care and maintenance to extend wear life and decrease clothing expenditures.

Clothing construction courses such as basic sewing, making children's and infants' clothing, jogging suit

construction and sewing of denims and swimwear provided the young family with dollar saving skills. The Baby Budget program focusing on clothing and furniture information was often offered as part of prenatal or postnatal classes.

Courses on fitting, tailoring and lingerie, as well as wardrobe planning, helped the farm woman improve her self image while maximizing her clothing dollar. Updating on what's new in fabric, notions and machines helped home sewers make informed purchasing decisions. Response to enquiries and provision of one session courses were the most usual methods of providing clothing information. In 1985/86 the clothing program reached 3,800 people.

4-H

Home economists continued to support the 4-H program by promoting programs, training program assistants, leaders and members, and monitoring and evaluating new projects (e.g., money management project). Other involvement came through judging and input at rallies, district councils, regional and provincial conferences and summer camps.

In 1985/86 home economists made 12,840 contacts in the 4-H program.

Media

Home economists use mass media extensively and effectively to increase awareness and provide home economics information to the public. All home economists write weekly columns in local newspapers. Radio items were produced by the staff in Northwest, Southwest and Eastern regions, and by other staff as opportunities arose.

Southwest and Northwest home economists contributed regularly to the weekly television program "Take Time." Other home economists used local TV programs. Tapes from these programs were used by home economists in small group settings.

Regional newsletters produced by Interlake, Central and Southwest staff extended home economics information to a wide regional audience.

Newsletters were also prepared by some home economists for special groups in their districts (e.g., newsletter for parents of toddlers).

Agricultural Extension Centre

The Agricultural Extension Centre, located in Brandon, continued to coordinate adult education and extension training activities for many rural Manitobans. During the year a total of 717 events were held at that location, involving a total attendance of 22,900.

The Centre sponsored 27 courses during the year with 3,050 participants. A further 112 events of more than one day were sponsored by organizations other than the Extension Centre and involved 4,900 people. Additional events of one day or less numbered 578.

The Extension Centre continued to provide dining room and residence services when required. This activity resulted in 21,700 meals being served and 4,780 accommodated in the residence.

Instructors for the Centre-sponsored courses were drawn from Manitoba Agriculture, Agriculture Canada, University of Manitoba and from the farm sector. A total of 152 instructors were involved this year with 28 of them being farmers.

To keep the course program current and relevant, feedback and evaluation was encouraged from participants. This resulted in some emphasis being placed on farm family courses this year which included several sessions on retirement planning.

The regular issue of "Ag Action" helped maintain interest and participation in Extension Centre events. In addition, the media showed a continuing interest in the many programs, with three to four media representatives attending each course. Other activities during the year included taking some programs to the rural areas. This involved the use of video tape and teleconferencing in some cases.

The Agricultural Extension Centre was declared a Provincial Heritage Site in August of 1985.

Agricultural Manpower

This service is administered through the Federal/Provincial Agricultural Employment Development Agreement in effect to March 1986. Some general direction for the agricultural manpower offices comes through the Manitoba Agricultural Employment Development Committee established under the agreement. Regular contact and cooperation with regional personnel at both the provincial and federal level is maintained.

The committee's mandate included:

1) Cooperation in a coordinating role with regional personnel of both governments, for the approval and monitoring of agricultural training occurring on the job through the General Industrial Training Program. Further, the agricultural manpower staff person was responsible for approving and monitoring all General Industrial Training programs contracted by the Manitoba Indian Agricultural Program.

2) Participation in determining supply and demand for agricultural labour; participation in determining training needs to match the employment opportunities.

3) Participation in meetings, seminars, workshops and studies relating to the training needs of farmers, particularly in personnel management, and assistance in the preparation and initiation of appropriate training and resources.

4) Liaison and cooperation with Manitoba Agriculture and Department of Education Post Secondary and Adult Continuing Education personnel in assessing training needs, content of training programs and appropriate locations for delivery.

5) Reviewing, printing and distributing guidelines and information on employment standards, employer/employee relations, personnel management, and workers compensation as related to the agricultural workplace.

Agricultural Training

Nine training courses delivered through Assiniboine Community College to satisfy locally identified training needs, provided training to 245 farmers and 24 farm workers. The need for equipment operation courses for farm women was identified. Courses were delivered in two locations. Manitoba Agriculture has some responsibility for reviewing the production content of these courses.

Offshore Workers

For 1985, 32 Mexican workers worked on three vegetable farms in the Portage la Prairie area. Each year growers wishing to import labour meet with the Manitoba Farm Workers Association and agree on a joint recommendation to the provincial and federal governments as to how many offshore workers will come into Manitoba.

In another area, nine custom harvester units consisting of 19 combines and 31 trucks came into Manitoba to custom harvest on eight Manitoba farms.

Portage Project — Continuing Programs and Services

- A daily transportation service brought workers to farms. This service was funded by Employment and Immigration Canada.
- A two-day seminar/workshop in personnel management was arranged and delivered in cooperation with the Vegetable Growers Association of Manitoba. Twenty-nine farmers participated in the event which covered topics including employee selection, recruitment, motivation and remuneration.
- Alcoholism Foundation of Manitoba continued to make their services available for any Employee Assistance Program needs that arose.
- The Portage and Headingley Correctional Institutions, on an ad-hoc basis, provided people for short term field or warehouse work.

Agricultural Exchange Program

The International Agricultural Exchange Association (I.A.E.A.) had 77 trainees on Manitoba farms in 1985. Upon their arrival in Manitoba in early April, they attended a five-day orientation seminar that introduced them to Canadian agricultural practices, customs and laws. The trainees then proceeded to live and work on host family farms until October, with the exception of a three or four-week vacation period for travel. Thirty-two Manitobans left on this program for work experience in Europe, Australia or New Zealand.

Agricultural Societies

In 1985 there were 64 active agricultural societies in Manitoba organized under Chapter A30 "An Act Respecting Agricultural Societies." The agricultural societies program input over the past 90 years has been instrumental in the successful development of rural agricultural communities.

Manitoba Agriculture provided support to agricultural societies in 1985 through various grants as follows: buildings and improvements $146,000; prize money $228,427; 4-H activities $14,509; judges $40,300; memberships $7,669; race meets $20,514.

Although livestock entries were down in some districts, most agricultural society fairs reported successful events. Activities such as king farmer competitions, tractor pulls, horse shows and rodeos continued to draw crowds. Societies are continually looking for new ideas to maintain educational agricultural interest in their fairs. Events such as workshops and seminars have increased in popularity and are attracting interest in many rural areas.

Annual Conference

The fourth annual two-day Provincial Agricultural Societies Conference was held in Brandon in November 1985. It was attended by 150 delegates. Focus was on workshops in marketing, recruiting volunteers and in financial management. As well, a display awareness presentation was provided by a graduate of interior design. Benefits from this workshop resulted in improved display halls. The Department of Culture, Heritage and Recreation organized and presented an entertainment showcase for delegates to the conference. As a result, many of the local entertainers participating in the showcase were hired by societies to entertain at their annual fairs.

The second Canada Packers Quilt Competition was held in conjunction with Manitoba Agriculture in 1985. Thirty-five quilts were judged at the time of the provincial conference and the winner, Mrs. Doris Warnica of Miami, was announced at the Royal Manitoba Winter Fair in March 1986. Mrs. Warnica's quilt was purchased by Canada Packers for $700 and has been included in an ongoing collection of Canada Packers quilts, which are available for viewing from the Manitoba Agricultural Societies office in Winnipeg.

Bursaries

Two bursaries are awarded yearly by the Agricultural Society Advisory Board through donations from agricultural societies. The Evelyn Ames Bursary of $500 was awarded to first year human ecology student Joyce Herbert of Tilston, and the N.C. MacKay Bursary was awarded to Romona Marie Mohr of Gunton, first year agriculture student.

Manitoba Agricultural Museum — Austin

The Manitoba Agricultural Museum at Austin attracts visitors from all parts of the world. The four-day Threshermen's Reunion held yearly in late July is the culmination of the efforts of many local residents interested in maintaining and preserving some of the early methods of farming.

Revenues from the reunion and from casual visitors assist in maintaining the collection, but substantial grants are necessary to maintain and develop the Museum. Manitoba Agriculture provided grants in the amount of $123,600 in 1985, to assist with operation and maintenance.

Manitoba Agricultural Hall of Fame — Brandon Keystone Centre

The Hall of Fame was established in 1976 to formally and publicly recognize individuals who have made outstanding contributions to the betterment of agriculture and rural living in Manitoba. Manitoba Agriculture assists with the financing of the Hall of Fame by providing an annual grant of $12,400, paid on a matching two for one formula. If the Hall of Fame raises $6,200, the department pays the total grant of $12,400.

Keystone Centre — Brandon

Built in 1973, the Keystone Agricultural and Recreational Centre serves the agricultural, recreational and entertainment needs of Brandon and surrounding districts. Each year the Provincial Exhibition uses the facilities for the Royal Manitoba Winter Fair, Provincial Exhibition (summer fair) and Ag Ex (fall fair). Livestock Breed Associations and individual producers also use the Keystone Centre for shows and sales throughout the year.

Under the Keystone Agreement, the Province of Manitoba and the City of Brandon share equally in any operating deficit. In 1985, the operating deficit was $99,222, making the provincial grant $49,611.

Horse Race Meets

During the year, harness horse racing meets were held at Portage la Prairie, Wawanesa, Carman, Virden, Dauphin, Carberry, Russell, Minnedosa, Killarney, Glenboro, Pilot Mound, Deloraine and Holland. Each Society was supported to a maximum of $10,000 per day. This was made possible through the retention of monies collected from pari-mutuel betting, plus a supplemental grant of 2½ per cent of the total betting pool. The total supplement grant in 1985 for this purpose was $20,514.

Manitoba Women's Institutes

The Manitoba Women's Institutes had a membership of 1,640 active members in 1985, located in 97 local institutes throughout the province. The Institutes provided valuable family and community educational and social programs to their membership.

The provincial board worked very closely with the Home Economics Directorate and in the field with

district home economists, providing leadership and social support in many areas of general need and concern.

Manitoba Agriculture's grant to the Manitoba Women's Institutes in 1985 was $31,900.

Manitoba Farm Vacations Association

Organized in 1972, this association, through its 60 host families, offers prospective vacationers an opportunity to enjoy first hand, rural mid-western hospitality.

Host farms offer a wide selection of what farming is all about, ranging from large cattle ranches or major dairy operations to grain and mixed farms of all sizes. By participating in the program, farm families supplement their farm income in a small way and also enjoy the social interaction.

During 1985, the 55 active host families in Manitoba hosted 9,830 guests. School tours numbered 305, with over 19,000 students visiting host farms. During 1985, the Farm Vacation Association received a provincial grant of $23,700.

Century Family Farm Program

In 1981, the Century Family Farm program was established by the Department of Agriculture. Any family currently operating and residing on a farm which has been operated and occupied continuously by the family for one hundred years or more can apply for and, on proof of information, receive a gate sign and certificate recognizing their accomplishment. To date a total of 525 families have been acknowledged through this program. In 1985 a total of 33 presentations were made to Century Family Farms.